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**The Verbal Complex in Classic-Period Maya Hieroglyphic Inscriptions:
Its Implications for Language Identification and Change**

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Its Implications for Language Identification and Change**

by

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To:

Carolyn Shelley
David and Amy
Laurie and Vilem
Tom
Jesse and Wyatt

In Memoriam:

Linda Schele
Kathryn Josserand
John Montgomery
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The Verbal Complex in Classic-Period Maya Hieroglyphic Inscriptions: Its Implications for Language Identification and Change

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Classic-Maya writing-system signs have been divided into syllabograms and logograms. However, examination reveals that not all function neatly within that division. Selections from both types are categorized by pictorial content and function in practice. Evidence is examined indicating that some logograms depict something different from what they write. Theories proposing grammatical logograms are evaluated. Evidence suggests that both groups depend upon reading strategies tied to phonetic rather than semantic criteria. A functional view suggests that the language provides the semantic, morphemic, and grammatical information while the signs serve as the medium that records it.

Among the data are verb forms and other morphemes that interact with them. Several are examined because of their importance as evidence for later conclusions. These include verb forms uninflected morphologically for tense or incomplete-completive aspect in closely related languages. Among them are forms no longer attested in direct descendants but only in two close cousins, Tzotzil and Tzeltal. The texts also attest a temporal morpheme appended to virtually all types of verbs in specific contexts. Some have interpreted it as a completive or past-tense marker, but detailed evidence identifies it as an ungrammaticalized cognate of a temporal adverbial enclitic attached to numbers and time-period nouns in Mayan languages. Critical evidence comes especially from 16th Century Acalan Chontal which attests it as a sentential enclitic rather than one limited to specific word classes as in later Ch'olan languages. With this identification, no other viable candidate for incomplete-completive aspect or present-past tense remains in Classic Ch'olan. Subsequent Ch'olan languages take different approaches to developing aspects, thereby strengthening the evidence for their more recent origin.

Identification of Ch'olan as the language of the Classic Mayan texts has been securely established elsewhere. The question addressed here is whether it represents an immediate ancestor of all or just one branch of the Ch'olan languages. Evidence is presented favoring it as ancestral to all of them. Each language has preserved different elements of Classic Ch'olan. Interpretations limiting the ancestral language to just one current Ch'olan language fail account for likely rapid change under the stress of occupation and relocation.

Table of Contents

List of Figures.	xxv
1 Introduction.	1
1.1 Language and Society.	1
1.1.1 Ethnography of Writing.	1
1.1.2 Dialogic Connection to Community.	1
1.2 Grammar within Discourse-Centered Approach.	2
1.2.1 Grammatical Abstraction.	2
1.2.2 Synthesis and Hyper-synthesis.	3
1.2.3 Balance Between Modern Language Sources and Actual Texts. . .	4
1.2.4 Grammar Beyond Sentence Level.	5
1.3 Historical Analysis and Language Change.	5
1.3.1 Proto-Language Reconstructions.	5
1.3.2 Some Relevant Issues in Historical Analysis.	6
1.3.3 New Paradigm for Language Change.	7
1.3.4 Strategies in Language Practice.	8
1.3.5 Further Ramifications of Dixon's Model.	8
1.4 Verbal Complex.	9
1.4.1 Importance of Verb Morphology.	9
1.4.2 Verb Morphology and Ethnographic Interpretation.	10
1.4.3 Verb Morphology and Genre.	11
1.5 Methodology.	11
1.5.1 Context and Morphology.	11
1.5.2 Use of Colonial and Current Language Information.	12
1.5.3 Consideration of Items Outside Verbal Complex.	13
1.5.4 Descriptive Approach to Grammar.	14
1.6 Scripts in Mesoamerica.	15
1.6.1 Central Mexican Scripts.	15
1.6.2 Isthmian (Epi-Olmec) Script.	16
1.6.3 Mayan Language Script.	16
1.6.4 Academic Interest in Maya Hieroglyphic Writing.	17
1.6.5 Value of Maya texts for Linguistics.	18
2 Characteristics of the Classic-Maya Writing System.	20
2.1 Phoneticism.	22
2.1.1 Early History of the Proposal.	22
2.1.2 Posing the Question.	23
2.1.3 Thompson and Diego de Landa's "Alphabet".	24
2.1.4 Thompson and "Rebus Writing".	25
2.1.5 Thompson and Ideograms.	26

2.1.6	Thompson and Whorf.	28
2.1.7	Logograms versus Ideograms.. . . .	29
2.1.8	Logograms, Syllabograms, and Phonetic Signs.. . . .	30
2.2	Overview of Maya Hieroglyphic Sign System.. . . .	34
2.2.1	Need for Revision of Conceptual Framework.	34
2.2.2	Definition of Terms.	35
2.2.3	Phoneticism and Writing Systems.	38
2.2.4	Phoneticism and Alphabetic Writing Systems.. . . .	38
2.2.5	Mayan Languages and Alphabet to Write Them.	42
2.2.5.1	Mayan Family Tree.	42
2.2.5.2	Modern Alphabet for Mayan Languages.	43
2.2.5.3	Correspondence with Sources Using Different Orthographies.. . . .	44
2.2.5.4	Abbreviations Used in Figures for Morpheme Analysis.	47
2.2.6	Comparison of Syllabic and Logographic signs.	48
2.2.6.1	CV Glottal-Stop Syllables Versus “Pure” Vowels.	48
2.2.6.1.1	Examples of Phonemic Use of Glottal Stops.	48
2.2.6.1.2	Word Initial Use of Glottal Stops.	50
2.2.6.1.3	Comparison of hV Syllabograms with ’V Syllabograms.	51
2.2.6.1.4	Evidence Based upon Scribal Practice.	53
2.2.6.1.5	Comparison with Colonial-Period Alphabetic Practices.. . . .	54
2.2.6.1.6	Use of ’V Syllables When Glottal Stop Not Needed.	56
2.2.6.1.7	Clarification of Issues and Explanation of Approach.	58
2.2.6.2	Some Shared Characteristics of Syllabograms and Logograms.	59
2.2.6.2.1	Classic Ch’olan Syllabary.. . . .	59
2.2.6.2.2	Both Logograms and Syllabograms Can Write Single Syllables.	62
2.2.6.2.3	Both Types of Signs Feature Pictorial Representations.	63
2.2.7	Classic-Maya Sign System: Pictorial Appearance, Phonetic Content.. . . .	64
2.2.7.1	Clarification of Terminology: “Pictorial”.	64
2.2.7.2	Methods of Decipherment.	66
2.2.7.3	Character of Pictorial Content.	68
2.2.7.4	Grouping of Signs by Pictorial Content: Logograms.. . . .	70
2.2.7.4.1	Depiction of Action.. . . .	70

2.2.7.4.2	Depiction of Symbol or Icon of Action..	72
2.2.7.4.3	Depiction of Body-part or Tool Used for Action..	72
2.2.7.4.4	Depiction of Product Produced by Action.	73
2.2.7.4.5	Depiction of Result of Action..	74
2.2.7.4.6	Depiction of Object, Animal, or Other Being.. . . .	75
2.2.7.4.7	Depiction of Part Standing for Whole Object, Animal, or Other Being.	76
2.2.7.4.8	Depiction of Symbol or Icon of Object, Animal, or Other Being.	77
2.2.7.4.9	Depiction of Gesture..	78
2.2.7.4.10	Depiction of Icon for Item That Uses Object	79
2.2.7.4.11	Depiction of Object Made of Specific Material.	80
2.2.7.4.12	Brief Comment on Pictorial Content of Logograms.	81
2.2.7.5	Grouping of Signs by Pictorial Content: Syllabograms.. . .	81
2.2.7.5.1	Depiction of Action..	82
2.2.7.5.2	Depiction of Result of Action..	83
2.2.7.5.3	Depiction of Body-part.	83
2.2.7.5.4	Depiction of Object, Animal, or Other Being.. . . .	84
2.2.7.5.5	Depiction of Part Standing for Whole Object, Animal, or Other Being.	85
2.2.7.5.6	Depiction of Symbol or Icon of Object..	86
2.2.7.5.7	Depiction of Body-Part or Plant-Part..	87
2.2.7.5.8	Comment on Pictorial Content of Syllabograms and Logograms.	87
2.2.8	Classification of Logograms and Syllabograms by Other Criteria.	89
2.2.8.1	Logograms That Write Two-Syllabled Words..	89
2.2.8.2	Composite or Conflated Logograms Both with Individual Phonetic Values.	92
2.2.8.3	Polyvalent and Carrier Glyphs Including Both Logograms and Syllabograms.	93
2.2.8.3.1	Signs Basically Identical in Form but Value Varies Depending upon Context.	94
2.2.8.3.2	Carrier Glyphs: Same Basic Sign but with Noticeable Differences..	96
2.2.8.4	Signs Occurring in Partial and More Complete Forms.	101

2.2.8.5	Historical Developments: Diachronic Variation in Value.	104
2.2.8.5.1	Logographic Signs Developing into Syllabograms.	105
2.2.8.5.2	Sign with Final Glottal Stop That Remained Primarily Logographic.	106
2.2.8.5.3	Sign Interpreted as Either Logogram or Syllabogram.	108
2.2.8.5.4	Syllabogram with Late Quasi-Logographic Status.	110
2.2.8.5.5	Syllabogram Infixed to Create Logogram with Localized Usage.	111
2.2.8.6	Glyphic Abbreviation and Ellipsis.	115
2.2.8.6.1	Abbreviation and Ellipsis: Name of <i>Yax Pahsaj Chan Yopaat</i>	116
2.2.8.6.2	Abbreviation and Ellipsis: Name of <i>Yukno'm Ch'en</i>	119
2.2.8.6.3	Shortening or Ellipsis Likely Phonetically Influenced.	121
2.2.8.7	Specific Meaning of Word Written with Logogram Differs from Item Depicted.	124
2.2.8.7.1	Meanings Etymologically Related but Noticeably Different.	125
2.2.8.7.2	Meanings Not Etymologically Related: "Rebuses".	127
2.2.8.7.3	Interchangeability Among Logograms.	131
2.2.8.7.4	Logograms Used to Write Suffixes.	135
2.2.8.7.5	Pairs of Logograms Used to Write Third Word.	141
2.2.8.8	Syllabograms That Write Words.	148
2.2.9	Extra-Linguistic Pictorial Embellishment of Syllabic and Logographic Signs.	149
2.2.10	Syllabograms and Meaning.	153
2.2.10.1	Thompson: 'u Sign as 3 rd Singular Ergative Pronoun.	154
2.2.10.2	CV Syllabograms Doubling as VC "Grammatical Logograms".	155
2.2.10.3	"Morphosyllables": "Grammatical Logograms" Revisited.	157
2.2.10.4	Comparison of "Grammatical Logogram" and "Morphosyllable" Theories.	160
2.2.10.5	General Problems with Theory of Morphosyllables. . .	162

2.2.10.6	Problems with Application of Morphosyllable Theory to English Writing System.	163
2.2.10.7	Further Contentions of Morphosyllable Theory.	167
2.2.10.8	Issues Raised by Treatment of Some Dependent Pronouns as Morphosyllables and Grammatical Logograms.	169
2.2.10.9	Issues Raised by Same Syllabogram Writing Different Grammatical Suffixes.	171
2.2.10.10	Issues Raised by Syllabograms of Different Values Writing Same Grammatical Suffixes.. . . .	174
2.2.11	Concrete Issues Underlying Theories of “Grammatical Logograms” and “Morphosyllables”.	176
2.2.11.1	Writing-System Characters Primarily for Reading, Not Grammatical Analysis.	177
2.2.11.2	Addressing Issues That Might Lead to Grammatical-Sign Theories.	179
2.2.11.3	Strategies for Reading Some Syllabograms in Question.	185
2.2.11.3.1	Reading Final wa and wi Syllabograms.	185
2.2.11.3.2	Reading Final yi Syllabograms.	187
2.2.11.3.3	Reading Final ji Syllabograms.	188
2.2.11.3.4	Reading Final l + Vowel (IV) Syllabograms.	189
2.2.11.3.5	Reading Final b’i Syllabograms.	193
2.2.11.3.6	Reading Final si Syllabograms.	198
2.2.11.3.7	Reading Final ja Syllabograms.	202
2.2.11.4	Brief Summary of Classic Maya Reading and Writing Strategies.	203
3	Selected Classic-Ch’olan Verb Morphology.	211
3.1	Brief History of Research into Classic Ch’olan Verb Morphology.	211
3.1.1	“Discovery” of Verbs.	211
3.1.2	Locating Verbs Through Structural Analysis.	212
3.1.3	From “Indicators” to Verbs and Verbal Affixes.	212
3.1.4	Detailed Studies of Verbal Affixes in Monumental Texts.	213
3.2	Transitive Verb Markers.	215
3.2.1	Root Transitive Verbs.	216
3.2.1.1	CVC-Root Transitive Marker.	217
3.2.1.2	Root Transitive Verb Markers Written with wi Syllable.	222
3.2.1.3	Possible Root-Transitive Verb Markers in <i>-V_j</i>	223

	3.2.1.4 Transitive Verbs without Root Transitive Status	
	Marker.	225
3.2.2	Non-CVC Transitive Verbs.	230
	3.2.2.1 Derivational suffix <i>-a</i>	230
	3.2.2.2 Derivational suffix <i>-i</i>	231
	3.2.2.3 Non-CVC root verb <i>il</i> “to see”.	235
	3.2.2.4 Lack of <i>-n</i> Incompletive Suffix on Derived	
	Transitives.	239
3.3	Intransitive Verb Markers.	240
3.3.1	CVC Intransitives.	241
	3.3.1.1 Issues Raised by Glyphic Spellings of CVC	
	Intransitives.	241
	3.3.1.2 Intransitive Roots without Markers.	244
	3.3.1.3 Evaluating Nature of Root Intransitive Marker.	246
	3.3.1.4 Completive Inflection in Chontal.	248
	3.3.1.5 Root Intransitive Status Markers and Thematic	
	Suffixes in Ch’orti’.	251
	3.3.1.6 Root Intransitive Status Markers and Thematic	
	Suffixes in Ch’olti’.	256
	3.3.1.7 Root Intransitive Status Markers versus Completive	
	Aspect Suffixes in Ch’ol.	263
3.3.2	<i>-VV_{ly}</i> Mediopassives.	268
	3.3.2.1 Interpreting Their Glyphic Form.	268
	3.3.2.2 Overview of <i>-VV_{ly}</i> Semantic Set.	269
	3.3.2.3 Case in Point: Transitive Root <i>pul</i> > <i>puluuy</i>	271
	3.3.2.4 Characterization of “Mediopassive” and “Middle	
	Voice” Constructions.	275
	3.3.2.5 Transitive Root: <i>tzutz</i> > <i>tzutzuuy</i>	278
	3.3.2.5.1 Evaluating Alternate Interpretation of Early	
	<i>tzutzuuy</i> Forms.	280
	3.3.2.5.2 More Likely Immediate Source for <i>-VV_{ly}</i>	
	Mediopassive Suffix.	283
	3.3.2.6 Transitive Root: <i>jatz</i> ’ > <i>jatz’aay</i>	288
	3.3.2.7 Transitive Root: <i>sat</i> > <i>sataay</i>	289
	3.3.2.8 Transitive Root: <i>jub</i> ’ > <i>jub’uuy</i>	290
	3.3.2.9 Transitive Root: <i>jom</i> > <i>jomooy</i>	293
	3.3.2.10 Transitive Root: <i>wol</i> > <i>wolooy</i>	294
	3.3.2.11 Transitive Root: <i>koj</i> > <i>kojooy</i>	295
	3.3.2.12 Transitive or Intransitive Root: <i>lok</i> ’ > <i>lok’ooy</i>	297
	3.3.2.13 Transitive or Intransitive Root: <i>t’ab</i> ’ > <i>t’ab’aay</i>	300
	3.3.2.14 Bound Transitive or Adjective/Intransitive Root:	
	<i>naj</i> > <i>najaay</i>	303

	3.3.2.15 Recap, Conclusions, and Hypotheses.	306
4	Resultative Aspect.	312
4.1	Recent Interpretations of Certain Lexemes with Glyphic ji Suffixes. . .	312
4.1.1	“Secondary Verbs” Sobriquet.	312
4.1.2	Misinterpretation as “Nominalized Antipassives”.	314
4.1.3	Macleod’s “Transitive Perfect” Proposal.	315
4.2	Resultatives in the Tzeltalan Languages.	317
4.2.1	“Perfect Participles” and “Transitive Perfective” in Tzeltal. . .	317
4.2.2	“Perfect Participles” and “Transitive Perfect Inflection” in Proto-Tzeltal-Tzotzil.	317
4.2.3	Alternative View of “Perfect” Suffixes in Bachajón Tzeltal. . .	319
4.2.4	Alternative View of “Perfect” Suffixes in Tzotzil of San Andrés.	321
4.2.5	Fresh Look at Tzeltal and Tzotzil “Perfect”.	323
4.2.6	John Smith’s <i>Manual de Tzeltal</i> and the “So-called Perfect”. . .	324
4.2.7	John Haviland’s “STAT” Aspect in Tzotzil.	327
4.3	Discussion of Forms and the Terminology Used to Refer to Them. . .	329
4.3.1	Typology of Stative, Resultative, and Perfect Aspects.	330
4.3.2	Resultative Versus Perfect: Adverbial Tests.	332
4.3.3	Resultative Versus Perfect: After-effects.	337
4.3.4	Real Versus Terminological Differences.	340
4.4	Resultative Inflection Versus “Perfect” Participles.	341
4.4.1	Typological Comparison: Antecedents of Indo-European Perfects.	342
4.4.2	Comparison of Typological Data with Tzeltalan and Classic Ch’olan.	348
4.4.3	Resultatives and <i>ay</i> , “exist”.	350
4.5	Transitive Resultative Suffixes and Their Look-alikes.	354
4.5.1	Derivation of Intransitives from Nouns and Adjectives by Suffixes in <i>-Vj</i>	357
4.5.2	Nouns Derived by <i>-Vj</i> Suffixes.	360
4.5.2.1	Nouns Derived by <i>-Vj</i> Suffixes from Intransitive and Positional Roots.	360
4.5.2.2	Nouns Derived by <i>-Vj</i> Suffixes from Transitive Stems.	361
4.5.2.3	Clues from Tzotzil on Fate of Nouns Derived by <i>-Vj</i> from Transitives in Tzeltal.	363
4.5.2.4	Similar Sets of <i>-Vj</i> Suffixes in Tojolab’al.	365
4.5.2.5	Derivational Compound Suffix <i>-ojel</i> in Tzeltal.	367
4.5.2.6	Some <i>-ojel</i> Suffixes in Tzeltal and <i>ji</i> - <i>ya</i> Glyphic Suffix in Classic Ch’olan.	369

4.6	Analysis of <i>-oj</i> and <i>-ej</i> suffixes in Colonial Tzotzil.	374
4.6.1	Inchoatives in <i>-Vj</i> Derived from Adjectives.	375
4.6.2	Antipassives in <i>-Vj</i> derived from Nominal Roots.	376
4.6.3	Nominalization of Antipassives and Inchoatives in <i>-Vj</i>	377
4.6.4	Antipassives, Inchoatives, and Agentives from Words with Multiple Roots.	380
4.6.5	Problematic Antipassive Examples	382
4.6.6	Verbal Nouns in <i>-oj</i> and <i>-ej</i> Derived from Transitive Stems. . . .	384
4.6.7	Transitive Resultatives in <i>-oj</i> and <i>-ej</i> as Represented in Contextualized Passages.	397
4.6.8	Conclusions from Analysis of <i>-oj</i> and <i>-ej</i> Suffixes in Colonial Tzotzil.	398
4.7	Transitive Resultative Inflection in Classic Period Texts.	402
4.7.1	Transitive Resultative Inflection on Irregular Stem <i>ila</i>	403
4.7.2	Transitive Resultative Inflection on Derived Stem <i>kab'i</i>	405
4.7.3	Transitive Resultative Inflection on Two Derived Positional Verbs.	406
4.7.4	Transitive Resultative Inflection Used for Direct Discourse. . . .	409
4.7.5	Transitive Resultative Inflection – Root <i>it</i>	411
4.7.6	Transitive Resultative Inflection – Root <i>at</i>	413
4.7.7	Discussion Concerning the Root <i>chok</i> and Transitive Resultative Inflection.	425
5	Intransitive Resultative Aspect.	434
5.1	Analysis of <i>-Vm</i> suffixes in Colonial Tzotzil.	434
5.1.1	Probable <i>-Vb</i> Suffixes listed as <i>-Vm</i> in Colonial Tzotzil: Locational Nominalizers.	434
5.1.2	Probable <i>-Vb'</i> Suffixes Listed as <i>-Vm</i> in Colonial Tzotzil: Instrumental Nominalizers.	436
5.1.3	Probable <i>-Vb'</i> Suffixes listed as <i>-Vm</i> in Colonial Tzotzil: Inchoatives.	438
5.1.4	Agentive Nominals in <i>-Vm</i> Derived from Various Roots.	440
5.1.5	Stative Gerunds and Participles in <i>-om</i> and <i>-em</i>	444
5.1.6	Intransitive Resultatives in <i>-om</i> and <i>-em</i>	451
5.2	Intransitive Resultatives and Temporal Enclitics in Classic-Ch'olan. .	461
5.2.1	Verb Form <i>uhto'm</i> in Classic Ch'olan.	461
5.2.2	Pair of Temporal Indicators in Ch'olan.	463
5.2.2.1	Reconstruction of a Pair of Temporal Indicators for Proto-Ch'olan.	464
5.2.2.2	Attested Variation in “Past” Temporal Enclitic Forms in Ch'olan Languages.	466
5.2.2.3	“Future” or “Non-Past” Temporal Enclitic.	468

5.2.2.4	Temporal Enclitics on Words Other than Numbers. . . .	470
5.2.3	The Temporal Enclitics in Classic Ch'olan.	472
5.2.3.1	Non-past Temporal Enclitic in Classic Ch'olan.	472
5.2.3.2	Behavior of These Enclitics on Distance Numbers in Classic Ch'olan.	473
5.2.3.3	Temporal Enclitics and Some Unconventional Distance Numbers in Classic Ch'olan.	477
5.2.3.4	Evaluation of Opposing Interpretation of Non-past Enclitic.	480
5.2.3.5	Forms of Past Enclitic on Numbers and Temporal Nouns in Classic Ch'olan.	485
5.2.4	Evidence for <i>-o'm</i> as Intransitive Resultative Instead of Future Inflection in Classic Ch'olan.	488
5.2.4.1	Resultative Interpretation at Least as Valid as Future. . .	491
5.2.4.1.1	Palenque Temple XVIII Censer Stand.	491
5.2.4.1.2	Naranjo Altar 1.	493
5.2.4.2	Distance Number Context with <i>o'm</i> Suffix and Count Away from Earlier Date.	496
5.2.4.2.1	Palenque Temple of the Foliated Cross Tablet.	497
5.2.4.2.2	Palenque Temple of the Foliated Cross Door Jamb.	500
5.2.4.3	Distance Number Context with Count Toward Later Date but <i>uhto'm</i> Not Present.	504
5.2.4.3.1	Seibal Hieroglyphic Stairway, Step 9.	505
5.2.4.3.2	Palenque Temple of the Sun Tablet.	507
5.2.4.4	Count Toward Later Date with <i>uhto'm</i> but No <i>-o'm</i> on Paired Verb.	509
5.2.4.4.1	Naranjo Stela 23.	510
5.2.4.4.2	Copán Altar Z.	513
5.2.4.5	Suffix <i>-o'm</i> on Verbs in Non-distance-number Contexts.	514
5.2.4.5.1	Copán Stela A.	514
5.2.4.5.2	Copán Structure 11.	519
5.2.5	Concluding Note on <i>-o'm</i> Resultative Suffix Usage in Classic Period.	521
6	Temporal Discourse Marking in Classic-Period Narrative.	522
6.1	Previous Approaches to Temporal Indicators in Classic-Period Texts.	522
6.1.1	Earlier Approaches to Temporal Indicators.	523
6.1.2	Isolating the AEI and PEI.	525

6.1.3	Beyond the PEI: <i>i</i> Versus <i>iwal</i>	529
6.1.4	Beyond the AEI: Temporal Deictic Enclitic <i>-ix</i>	533
6.1.5	Beyond the AEI: Completive-Aspect or Past-Tense Inflection.	535
6.2	Setting Stage for Revised View of Temporal Indicators.	537
6.2.1	Temporal Enclitics attached to verbs.....	537
6.2.2	Oldest Colonial Ch'olan Document Written by Native Speaker.....	539
6.2.3	Importance of Context for Morphological Analysis.	540
6.2.4	Comparing Function of Adverbial Enclitic <i>-ijiiy</i> ∞ <i>-iiy</i> to Verbal Taxis.....	541
6.3	Parallel Discourse Patterns in Classic Ch'olan and Acalan Chontal. . .	547
6.3.1	General Reference to Previously-Reported Event.	547
6.3.1.1	In Classic Ch'olan.	547
6.3.1.2	In Acalan Chontal.	549
6.3.2	Specific Reference to Earlier Event.....	553
6.3.2.1	Verb and Dependent Pronoun Repeated without Nominal Subject..	553
6.3.2.1.1	In Classic Ch'olan.....	553
6.3.2.1.2	In Acalan Chontal.	555
6.3.2.2	Verb, Dependent Pronoun, and Nominal Subject Repeated.....	558
6.3.2.3	Event Is Earlier in Time but Not Reported Elsewhere in Text.	560
6.3.2.3.1	In Classic Ch'olan.....	560
6.3.2.3.2	In Acalan Chontal.	562
6.3.3	Intratextual Self-Reference – Acalan Chontal Only.	563
6.3.4	Passages Providing Supplementary Identifying Information. . .	568
6.3.4.1	In Classic Ch'olan.....	569
6.3.4.2	In Acalan Chontal.	571
6.3.5	Additional Information About Contemporary Event.....	575
6.3.5.1	Identity of Responsible Party.....	575
6.3.5.2	Locative Information.	579
6.3.5.3	Contemporary Event: Information about Direct Discourse.	582
6.3.6	Distant Past.	584
6.3.6.1	Distant Past in Acalan Chontal.	585
6.3.6.2	Distant Past in Classic Ch'olan.	588
6.3.6.2.1	Historical Time.	588
6.3.6.2.2	“Mythological” Time.	592
6.4	Forms of Past Temporal Deictic Enclitic in Acalan Chontal.....	596
6.4.1	Smailus' Interpretation of Past Temporal Enclitic.....	596

6.4.2	Contrasting Homophonic Suffixes in <i>Paxbolon-Maldonado Papers</i>	599
6.4.2.1	Demonstrative pronoun <i>-i</i>	599
6.4.2.2	Locational Adverb <i>-i</i>	601
6.4.2.3	Completive Suffix <i>-i</i>	601
6.4.3	Variant Spellings of Past Deictic Enclitic <i>-ihi</i> ∞ <i>-i</i>	607
6.4.4	Evidence for Long Form <i>-ihi</i>	615
6.4.5	Sources of <i>h</i> in Verbal Compounds with Attached Enclitic.	616
6.4.5.1	Textual Arguments for Identifying <i>-ihi</i> as Long Form of Past Temporal Enclitic.. . . .	616
6.4.5.2	Reasons for Ruling Out <i>-h-</i> in <i>-ihi</i> as Epenthetic.	620
6.4.5.3	Reasons for Ruling Out <i>-ih-</i> in Acalan Chontal as Resultative Aspect.	621
6.4.6	Enclitics <i>-ix</i> and <i>-ihi</i> in Acalan Chontal and Other Ch'olan Languages.	637
6.4.6.1	More Literal Translation of <i>acathanihi</i>	637
6.4.6.2	Meaning and Function of <i>-ix</i> in Acalan Chontal.	638
6.4.6.3	Meaning and Function of <i>-ix</i> in Other Colonial and Modern Ch'olan Languages.	639
6.4.6.4	Functional Comparison of <i>-ix</i> and <i>-ihi</i> in Acalan Chontal.	643
6.5	Forms of Temporal Enclitic <i>-ijiiy</i> ∞ <i>-iiy</i> on Verbs in Classic Ch'olan.	645
6.5.1	On Transitives.	645
6.5.1.1	On Root Transitives.	645
6.5.1.2	On Derived or Non-CVC Transitives.	647
6.5.2	On Passives.	648
6.5.3	On <i>-VV₁y</i> Mediopassives.	653
6.5.4	On Antipassives.	655
6.5.4.1	Antipassives Derived from Root Transitives.	655
6.5.4.2	Antipassives Derived from Non-CVC Transitives.	658
6.5.5	On Intransitive Positionals.	660
6.5.6	On Root Intransitives.	662
6.5.7	On Verbs with Transitive Resultative Inflection.	664
6.5.8	On Gerunds.	667
6.5.9	Long Allomorph of Past Temporal Enclitic <i>-ijiiy</i> ∞ <i>-jiiy</i> Attached to Verbs.	670
6.5.9.1	Problematic Examples Not Counted as Long Versions of Past Enclitic.	670
6.5.9.1.1	Problematic Example: <i>jo-ch'o-ji-ya</i>	670
6.5.9.1.2	Problematic Example: <i>ma-'AK-ja-ji-ya</i>	672
6.5.9.1.3	Problematic Examples: Writing Strategies Used to Write Forms of <i>wa'</i> Positional.	673

	6.5.9.2 Evidence for Long Form of Past Temporal Enclitic on Verbs.....	682
	6.5.9.2.1 On 'OCH-b'i-ji-ji-ya.....	682
	6.5.9.2.2 On 'u-KAB'-ji-ji-ya.	687
	6.5.9.2.3 On WA'L-ji-ji-ya.	689
	6.5.9.2.4 On Two Verbs and a Gerund in Same Inscription.	692
	6.5.9.3 Response to Denial of Existence of Long Allomorph of Past Temporal Enclitic on Verbs.....	695
	6.5.9.3.1 Response to Critics' Statements That Examples are "Bizarre" and "Anomalous".	696
	6.5.9.3.2 Response to Interpretation of First Part of -ijiiy as Resultative Aspect.....	706
7	Tense, Aspect, and Temporal Adverbial Enclitics in Classic Ch'olan.	713
7.1	Brief History of Search for Tense and Aspect in Classic Inscriptions...	713
7.1.1	Search for Preposed Tense-Aspect Particles.	713
7.1.2	Search for Incompletive and Completive Aspect Suffixes.	714
7.1.3	Search for Split Ergativity.	715
7.1.4	Lack of Incompletive Aspect Inflection.....	720
7.1.5	"The Shifting Now": Incompletive and Completive Aspect Reinterpreted.	722
	7.1.5.1 Function of Incompletive and Completive in "The Shifting Now".....	722
	7.1.5.2 Problems with the Incompletive of "The Shifting Now".	724
	7.1.5.3 Character of Incompletive Aspect in Colonial Documents.....	725
	7.1.5.4 "Incompletive" and "Completive": Traditional Definitions Versus "The Shifting Now".	728
	7.1.5.5 Undercurrents of Better Solution.....	731
7.1.6	Changing Views on Aspect Following Conference in Provo. . .	732
	7.1.6.1 Incompletive and Completive in "The Language of the Classic Maya Inscriptions".....	734
	7.1.6.2 Temporal Enclitic or Completive Inflection: "The XXIII Maya Hieroglyphic Forum at Texas".	735
	7.1.6.3 Change from Aspect to Tense: Reply to Comments in Current Anthropology.	739
7.1.7	Proposed "Discovery" of Tense Inflection in Classic Script. . .	742
	7.1.7.1 Proposed Common Mayan "Inflectional Aspect" and "Adverbial Tense".....	743

	7.1.7.2 From “Inflectional Aspect” to “Inflectional Tense”: Unattested *x- Future.....	745
	7.1.7.3 Some Alternate Explanations for Ch’olti’ *x- Future or Subjunctive.	749
	7.1.7.4 From “Inflectional Tense” Back to “Inflectional Aspect”: Unattested Progressive.	751
	7.1.7.5 Main Problem Confronting Theory of Verbal Tense in Classic Ch’olan.	757
7.2	Tense, Taxis, and Aspect: Clarification of Terminology.....	760
7.2.1	Tense and Grammaticalization.	761
7.2.2	Grammaticalization Process.....	766
7.2.2.1	Clines: From Lexical to Grammatical.	767
7.2.2.2	Clitics and Their Characteristics.	769
7.2.2.3	Morphologization and Simplification.	772
7.2.2.4	Reflexes of <i>-ijiiy</i> ∞ <i>-iiy</i> and Types of Morphologization.....	773
7.2.3	Characteristics Indicating <i>-ijiiy</i> ∞ <i>-iiy</i> is an Enclitic.....	774
7.2.3.1	Sentential Versus Phrasal Enclitics.	775
7.2.3.2	Wider Range of Meanings than Morphological Inflection.	775
7.2.3.3	Broad Range of Hosts.	776
7.2.3.4	Neither Allomorph “Moves the Action Back in Time”.....	777
7.2.3.5	Not Common in Single Sentence or Short Passages. . . .	779
7.2.3.6	Narrative Back-Reference Contexts Favor Enclitic Interpretation.	782
7.2.3.7	Semantic Contexts of Presence or Absence Favors Enclitic Interpretation.	783
7.2.3.8	Irregularity of Behavior Points Towards Enclitic.	785
7.2.4	Absolute and Relative Tense: Tense and Taxis.....	789
7.2.4.1	Relative Tense: Taxis.....	791
7.2.4.2	Power of Adverbs.	792
7.2.4.3	Theory: All Tense is Relative in “Classic Ch’olti’an” and Lulubo.....	793
7.2.4.4	Questioning the Analogy with Lulubo.....	796
8	Language of the Classic Maya Script.....	802
8.1	Working Hypothesis.	802
8.2	Brief History of Classic Maya Hieroglyphic Language Identification..	802
8.3	Evidence Useful for Maya Classic-Period Script Language Identification.	806
8.4	“Classic Ch’olti’an” Language Hypothesis of Houston et al..	809

8.4.1	Claim: Only Immediate Direct Descendant is Ch'olti'-Ch'orti'	809
8.4.2	Summary of Houston et al.'s Argument for Ch'olti' Only.	813
8.4.3	Alternative Analysis of Data.	817
8.4.3.1	Lexical Item Purportedly Unique to "Ch'olti'an": <i>puluy</i>	818
8.4.3.2	Lexical Item Purportedly Unique to "Ch'olti'an": <i>pakxi</i>	820
8.4.3.3	Claim: Chontal Ruled Out as Descendant of Classic Ch'olan.....	824
8.4.3.4	Claim: Ch'ol Ruled Out as Descendant of Classic Ch'olan.....	827
8.4.4	Some Comments on Proposed Reconstructions.	830
8.4.4.1	Problem of Overcrowded Intransitive Positional Category.....	830
8.4.4.2	Proposed Reconstructions a Starting Point but Tendentious.	834
8.4.4.3	Limits of Comparative Method in Reconstructing Proto-Languages.	838
8.5	Evidence That All Ch'olan Languages Descend from Classic Ch'olan.....	840
8.5.1	Transitive and Intransitive Resultative in <i>-V_j</i> and <i>-o'm</i>	840
8.5.2	Mediopassive or passive in <i>-ax</i>	841
8.5.3	Mediopassive in <i>-V_ly</i>	841
8.5.4	Root Transitives in <i>-V_jw</i>	842
8.5.5	Root Intransitives in <i>-i</i>	843
8.5.6	Intransitive Positionals in <i>-wan</i> and <i>-laj</i> and Passives in <i>-h-C-aj</i>	844
8.5.7	Temporal Deictic Enclitics in <i>-ijj</i> and <i>-ijjiy</i> ∞ <i>-iiy</i>	849
8.5.8	Lack of Completive and Incompletive Aspect Forms in Classic Ch'olan.	852
9	Language Change.....	861
9.1	Theoretical Aspects.	861
9.1.1	Structural Anthropologist on Scientific Nature of Linguistic Analysis.	861
9.1.2	Some Linguists' Views on Nature of Linguistic Analysis.....	862
9.1.3	Some Preliminary Comments on Ch'olan Reconstructions Versus Epigraphical Findings.	863
9.1.4	Borrowing of Structural Patterns.	865
9.1.5	The Time Question Again.	867

9.1.6	Narrower View of Language Change and Broader View of Reconstruction.	869
9.2	Applying Change Theory to Ch'olan Languages.	871
9.2.1	Likely Impetus for Change Among Ch'olan Languages.	871
9.2.2	Ergativity and Split Ergativity.	874
9.2.3	Possessed Nominals or Progressive and Incompletive Aspect: Acalan Chontal.	878
9.2.4	Possessed Nominals or Progressive and Incompletive Aspect: Ch'olti'.	884
9.2.4.1	Nature of Ch'olti' Source Material.	884
9.2.4.2	Formation of Morán's "Present Tense" in Verbless Sentences.	885
9.2.4.3	Formation of Morán's "Present Tense" in Sentences with Verbs.	889
9.2.4.4	Comparison of Ch'olti' Forms with those of Acalan Chontal and Classic Ch'olan.	891
9.2.5	Progressive and Incompletive Aspect in Ch'orti'.	894
9.2.5.1	Fundamental Difference in Progressive and Incompletive Aspect Formation in Ch'orti'.	894
9.2.5.2	Leveling Theory Inadequate to Explain Lack of Nominal Incompletives.	897
9.2.5.3	Two Theories on How Third Pronoun Set Developed in Ch'orti'.	900
9.2.5.4	Alternative Theory on Development of Set C and Against Leveling in Ch'orti'.	902
9.2.6	Evidence That Development of Aspect Morphology Is Recent.	921
9.2.6.1	Review of a Proto-Ch'olan Reconstruction.	922
9.2.6.2	Revisions Based Upon Reevaluation of Ch'olan Languages.	924
9.2.6.3	Preliminary Conclusions.	925
9.2.7	Creation of Tense and Aspect Morphemes: Two Case Studies.	930
9.2.7.1	Searching for the Known Among the Strange.	930
9.2.7.2	Future and Modal Future Constructions among Ch'olan Languages.	931
9.2.7.2.1	Constructions with <i>-ik</i>	931
9.2.7.2.2	Constructions with <i>k'an</i> - "wish, want".	934
9.2.7.2.3	Constructions with Reflexes of <i>b'ix</i> "go".	939
9.2.7.2.4	Alternative Future Construction in Ch'ol.	940
9.2.7.3	Progressive and Progressive-like Constructions Among Ch'olan Languages.	942

9.2.7.3.1	Progressive or “Ongoing Present” in Acalan Chontal.....	943
9.2.7.3.2	Progressive in Modern Chontal.	944
9.2.7.3.3	Progressive in Ch’olti’.	945
9.2.7.3.4	Progressive in Ch’orti’.	946
9.2.7.3.5	Progressive in Ch’ol.	949
9.2.7.4	<i>Iwal</i> in Acalan Chontal and Classic Ch’olan.	954
9.2.8	Repercussions of Findings for Reconstructions of Proto-Ch’olan.....	962
9.2.9	Possible Application of Findings to Other Mayan Languages..	965
	References Cited.	970
	Vita.....	1008

List of Figures

Figure 1. Copy of de Landa's "Alphabet" from Photograph by Juan de Dios de la Rada y Delgado.	22
Figure 2. Thompson's "TUN" and MULUK signs.	26
Figure 3. Glyphs writing <i>k'in</i> "day", <i>lak'in</i> "east," and <i>chik'in</i> "west" according to David Kelley in 1976.	32
Figure 4. Example of "rebus writing"	33
Figure 5. Syllabic sign that can also write a word.	34
Figure 6. Members of the Mayan language family.	41
Figure 7. Partial ALMG alphabet including phonetic equivalents.	42
Figure 8. Some orthographic variants appearing in sources.	45
Figure 9. List of abbreviations used for morpheme analysis in figures.	47
Figure 10. Various signs beginning with glottal consonants or vowels.	56
Figure 11. Syllabary: Part 1.	60
Figure 12. Syllabary: Part 2.	61
Figure 13. Two logograms that write single-syllabled CVC roots.	62
Figure 14. Signs for "Grasshopper Hill and "Rain Hill"	64
Figure 15. Logographic and partially syllabic spellings of the same names.. . . .	67
Figure 16. Logograms depicting actions.. . . .	71
Figure 17. Logogram depicting symbolic or iconic representation of an action.. . . .	72
Figure 18. Logograms depicting tool or body-part.	72
Figure 19. Logograms depicting product generated by an action	73
Figure 20. Logograms depicting the result of an action	74
Figure 21. Logogram depicting object, animal or other being	75
Figure 22. Logograms depicting part standing for whole.	76
Figure 23. Logograms depicting symbol or icon of object	77
Figure 24. Logogram depicting gesture.	78
Figure 25. Logogram depicting icon or symbol of item that uses the object.	79
Figure 26. Logogram depicting object made of material referred to by word	80
Figure 27. Syllabograms depicting action.. . . .	82
Figure 28. Syllabograms depicting result of an action.	83
Figure 29. Syllabograms depicting body parts	83
Figure 30. Syllabogram depicting an animal.	84
Figure 31. Syllabograms depicting parts of objects, animals, or other beings standing for whole.	85
Figure 32. Syllabograms depicting symbols or icons of objects.. . . .	86
Figure 33. Syllabograms depicting body-part or plant-part.	87
Figure 34. Logograms that write words of two syllables.	89
Figure 35. Composite or conflated logograms, each preserving its own value.. . . .	93
Figure 36. Polyvalent sign: T1000/T1002.	94
Figure 37. Polyvalent sign T528.	95

Figure 38. Carrier signs: “ <i>Imix</i> glyph”.	96
Figure 39. Carrier sign: “vulture”.	97
Figure 40. Signs occurring in partial and more-complete forms.	102
Figure 41. Logograms developing into syllabograms over time: B’AH > b’a .	105
Figure 42. Logogram TE’ and syllabogram te .	106
Figure 43. Syllabogram with limited sporadic status as a logogram or quasi-logogram.	108
Figure 44. Quasi-logograms: syllabograms possibly reinterpreted as logograms.	110
Figure 45. Logogram with localized usage created by infixation.	112
Figure 46. Spelling strategies when writing CVC suffixes for CVC roots.	113
Figure 47. Variation in the first part of the name of <i>Yax Pahsaj</i> .	116
Figure 48. Variants of <i>Yopaat</i> appearing in <i>Yax Pahsaj</i> ’s full name.	117
Figure 49. Variation in writing the name of <i>Yukno’m Ch’e’n</i> .	120
Figure 50. Elision that is likely phonetically influenced by the contextual environment.	121
Figure 51. Ellipsis in a well-attested abstractive suffix	122
Figure 52. Logograms used to write different etymologically related words: WAY .	125
Figure 53. Logogram writing homonym of word referring to depicted content: ’OK	128
Figure 54. Logogram writing homonym of word referring to depicted content: ’OCH .	130
Figure 55. CHAN (T74 “Snake Head”) as a “rebus”.	131
Figure 56. Interchangeable set of logograms.	133
Figure 57. Different ways of writing the plural suffix: <i>-taak</i> .	136
Figure 58. Signs similar to the logogram that writes <i>-taak</i> .	136
Figure 59. Logogram used to write a suffix.	138
Figure 60. Pairs of logograms writing verb not written by either member of pair.	140
Figure 61. Two different logograms both writing same root.	141
Figure 62. More common versions of TZ’AK logograms.	146
Figure 63. Syllabograms that write words.	148
Figure 64. Extra-linguistic embellishment of a syllabogram.	149
Figure 65. Signs similar to ja (T181) with different values or writing different words.	150
Figure 66. Iconographic representation of rabbit, moon Goddess and T181 as moon sign.	151
Figure 67. Extra-linguistic embellishment of a logogram.	152
Figure 68. Thompson’s u signs.	154
Figure 69. Some signs supposedly polyvalent because of alternate “grammatical values”.	156
Figure 70. Proposed “regular” and “irregular morphosyllables”	158
Figure 71. Comparison of two theories that propose grammatical values for syllabograms.	160

Figure 72. Some of the many syllabic 'u signs	169
Figure 73. Some syllabograms used to write the 3 rd person singular dependent pronoun preceding glottal /h/ and glottal stop /'/.	170
Figure 74. Syllabic sign wa used to write different morphemes.. . . .	171
Figure 75. Syllabograms la and ja used to write suffix deriving a gerund.. . . .	173
Figure 76. Last part of <i>-hC-(a)j</i> passive suffix written with ja and two ji syllabograms.	174
Figure 77. Reading strategies for logographic and syllabic spellings of the same root and suffix.	179
Figure 78. Rare syllabic spelling of a verb in the passive form.	180
Figure 79. Two forms of an intransitive positional verb with extra vowel at root boundary.. . . .	181
Figure 80. Syllabic and logographic spellings of a passive verb form	183
Figure 81. Two differently-valued syllabograms writing same suffix and same suffix writing two different morphemes.	185
Figure 82. Logographic and syllabic spellings of a mediopassive verb form	187
Figure 83. Logographic and syllabic spellings of a resultative verb form	189
Figure 84. Forms written with a final IV (I plus vowel) syllabograms.. . . .	190
Figure 85. Forms written with a final bi syllabogram.. . . .	193
Figure 86. Use of non-final b'i and final li syllables to write <i>-b-il</i> suffix.. . . .	196
Figure 87. Lexemes written with a final si syllabogram.. . . .	199
Figure 88. Variation in the spelling of lexemes with a final si syllabogram.. . . .	200
Figure 89. Working Model of Linguistic Levels by David Crystal (1987).. . . .	209
Figure 90. Status marker for root transitive verbs in Ch'ol and Ch'olti'.	217
Figure 91. Transliterated syllabic value of T130.	217
Figure 92. Various ways of writing root transitive forms as evidence for transcription.. . . .	218
Figure 93. Passive forms with ka syllable before ja to indicate correct vowel.	221
Figure 94. Rare examples of root transitives written with final wi syllabograms.	222
Figure 95. Possessed compound nouns in verbless sentences or transitive verbs without wa ?.	224
Figure 96. Examples from Ch'orti' of compound nouns formed by prefixing verb to noun.	226
Figure 97. Effect of space considerations on sign size.	228
Figure 98. CHOK sign preceded by ch'a sign.	229
Figure 99. Noun versus derived transitive verb.	231
Figure 100. Colonial Ch'olti' derived transitive forms in <i>-i</i> and <i>-in</i>	232
Figure 101. Evidence for KAB' value of logogram T526 outside of day sign context	233
Figure 102. <i>Kab'</i> instead of <i>chab'</i> in Chontal and Ch'olti'.	234
Figure 103. Irregular derived transitive verb based upon <i>il</i> root	235
Figure 104. Possible transitive forms of <i>il</i>	236

Figure 105. Occurrences of <i>yili</i> in Acalan Chontal document	238
Figure 106. Root intransitives written with syllabograms and logograms.	241
Figure 107. Compounds written with logograms that can also write CVC intransitive root verbs.	245
Figure 108. Reconstruction of Proto-/Common Ch'olan root intransitive status markers.	246
Figure 109. Completive inflection in Acalan and Modern Chontal.	248
Figure 110. Thematic suffixes in Ch'orti' and their effect on imperative forms.	251
Figure 111. Ch'olti' root transitives with <i>-i</i> thematic suffixes.	257
Figure 112. Some affixes occurring on root intransitive verbs in Ch'olti'	258
Figure 113. Ch'ol root intransitive status marker <i>-i</i>	263
Figure 114. Use of the root intransitive status marker in Ch'ol.	264
Figure 115. Two examples of <i>-VV_{ly}</i> mediopassives used with <i>ukab' i-</i> sentences to add information about the person who oversaw the event reported in the previous sentence.	267
Figure 116. Some intransitive verbs in Ch'orti' that take the <i>-V_{ly}</i> thematic suffix	269
Figure 117. Some <i>-V_{ly}</i> intransitives in Ch'olti'	270
Figure 118. Three different forms attested for the verb root <i>tzutz</i>	278
Figure 119. Chart by Hruby and Robertson showing distribution of <i>tzutz</i> verbal forms over time.	280
Figure 120. Some early passive forms in <i>-hC-aj</i>	282
Figure 121. <i>Tzuhtzaj</i> passive on Caracol Stela 14.	282
Figure 122. Some verbs derived by the <i>-V_{ly}</i> mediopassive suffix that are not attested with <i>-hC-aj</i> passive suffixes.	283
Figure 123. Mediopassive and passive forms of <i>tzutz</i> on same monument.	285
Figure 124. The verb <i>jatz</i> derived as a mediopassive in Classic Ch'olan.	288
Figure 125. The verb <i>sat</i> derived as a mediopassive Classic Ch'olan.	288
Figure 126. The verb <i>jub'</i> derived as a mediopassive Classic Ch'olan.	291
Figure 127. The verb <i>jom</i> derived as a mediopassive Classic Ch'olan.	293
Figure 128. The verb <i>wol</i> derived as a mediopassive in Classic Ch'olan.	295
Figure 129. The verb <i>koj</i> derived as a mediopassive in Classic Ch'olan.	296
Figure 130. The verb <i>lok'</i> derived as a mediopassive in Classic Ch'olan.	298
Figure 131. Verb <i>tab'</i> derived as a mediopassive in Classic Ch'olan.	300
Figure 132. The “God N” verb.	302
Figure 133. The verb <i>naj</i> derived as a mediopassive in Classic Ch'olan.	303
Figure 134. One of most common so-called “secondary verbs” <i>'u-kab'-ji</i>	312
Figure 135. Other verbs written with final <i>ji</i> sign and appearing in syntactic contexts similar to <i>'u-kab'-ji</i>	313
Figure 136. Forms designated as “perfect participle” and “perfective aspect” suffixes in Tzeltal by Kaufman (1971).	316
Figure 137. Derivational and inflectional suffixes reconstructed for Proto-Tzeltal-Tzotzil	318

Figure 138. “Tiempo perfecto” (“perfect tense”) of transitive, intransitive, and passive verbs in Bachajón Tzeltal.	319
Figure 139. “Tiempo perfecto” (“perfect tense”) of transitive, intransitive, and passive verbs in San Andrés Tzotzil.	322
Figure 140. Comparison between perfect (a) and resultative (b) sentences	332
Figure 141. Some terms used by linguists to refer to resultative aspect.	341
Figure 142. Use of <i>ay</i> in Tzeltal with transitive and intransitive verbs in incomplete, complete, and resultative	351
Figure 143. Examples of sentences in Tzotzil employing resultative aspect	354
Figure 144. Intransitive verbs derived from nouns by <i>-Vj</i> suffixes in Tzeltal.	356
Figure 145. Intransitive verbs derived from adjectives by <i>-Vj</i> suffixes in Tzeltal.	357
Figure 146. Suffixes that derive intransitive verbs from nouns and adjectives reconstructed for Proto-Tzeltal-Tzotzil.	357
Figure 147. Nouns derived from intransitive and positional adjectival stems by <i>-ej</i> suffixes in Tzeltal.	360
Figure 148. Verbal nouns derived from transitive stems by <i>-ej</i> and <i>-oj</i>	361
Figure 149. Nouns derived from transitive verbs by <i>-oj</i> and <i>-ej</i> in Tojolab’al.	366
Figure 150. Verbal nouns derived from transitive roots by <i>-ojel</i>	367
Figure 151. Colonial Tzotzil Versives (Inchoatives) in <i>-Vj</i> derived from adjectives.	375
Figure 152. Colonial Tzotzil Antipassives in <i>-Vj</i> derived from Nominal Roots	376
Figure 153. Colonial Tzotzil Antipassives, inchoatives, and agentives from words with multiple roots.	379
Figure 154. Colonial Tzotzil problematic antipassive derivations.	382
Figure 155. Colonial Tzotzil verbal nouns in <i>-oj</i> and <i>-ej</i> derived from transitive stems – translated into Spanish as present progressive.	384
Figure 156. More Colonial Tzotzil verbal nouns derived by <i>-oj</i> and <i>-ej</i> from transitive stems – translated into Spanish as present tense	386
Figure 157. Some Colonial Tzotzil verbal nouns derived by <i>-oj</i> and <i>-ej</i> from transitive stems, but translated into Spanish as passive	388
Figure 158. Comparison of Spanish translation of same root with three different suffixes.	389
Figure 159. More Colonial Tzotzil verbal nouns derived by <i>-oj</i> and <i>-ej</i> from transitive stems – translated into Spanish as simple nouns	389
Figure 160. Reflexives inflected for resultative aspect in <i>-oj</i> and <i>-ej</i>	391
Figure 161. Some problematic or misinterpreted examples of reflexives inflected for resultative aspect.	394
Figure 162. Transitive resultatives in <i>-oj</i> and <i>-ej</i> as represented in contextualized passages.	396
Figure 163. Transitive verb roots and stems that occur most frequently inflected for resultative aspect in Classic-Ch’olan texts	402
Figure 164. Some forms of transitive verb <i>il</i> inflected for resultative	403
Figure 165. Some forms of transitive verb <i>kab’i</i> inflected for resultative	405

Figure 166. Derived transitive positional inflected for resultative aspect..	407
Figure 167. Verb <i>pat</i> as root transitive and as derived positional verb inflected for resultative aspect	408
Figure 168. Transitive root <i>al</i> “say, speak” inflected for resultative aspect in connection with direct discourse	409
Figure 169. Transitive root <i>it</i> “join, accompany” inflected for resultative aspect.. . . .	411
Figure 170. “Paddler Gods” partnering with ruler in drops-throwing ritual on Jimbal Stela 1..	414
Figure 171. “Paddler Gods” partnering with ruler in drops-throwing ritual on Ixlu Stela 2..	415
Figure 172. Logogram MUYAL	416
Figure 173. Paddler Gods partnering with Toniná ruler in drops-throwing ceremony.	420
Figure 174. Paddler Gods partne44744ring with Toniná ruler who is accompanied by two other persons in drops-throwing ceremony..	421
Figure 175. Dot-bordered volutes in context of conjuring	422
Figure 176. Dot-bordered volutes in drops-throwing context..	423
Figure 177. Three compound nouns compared to same two roots as transitive verb and its object	426
Figure 178. Less common constructions with CHOK logogram	428
Figure 179. <i>Chokch’aqj</i> compound noun without final ji syllabogram..	430
Figure 180. Colonial Tzotzil suffix used as locational nominalizer..	435
Figure 181. Colonial Tzotzil suffixes used as instrumental nominalizers.	436
Figure 182. Tzeltal suffixes used as instrumental and locational nominalizers.	437
Figure 183. Colonial Tzotzil suffixes used to derive inchoatives..	438
Figure 184. Tzeltal suffixes used as inchoatives (“ingressives,” “versives”)..	438
Figure 185. Colonial Tzotzil suffix <i>-om</i> used to derive agentives from various stems.	439
Figure 186. Some Classic Ch’olan agentives in <i>-o’m</i>	441
Figure 187. Colonial Tzotzil stative gerunds and participles in <i>-om</i> and <i>-em</i>	444
Figure 188. Comparison of some nominals derived by <i>-om</i> with those derived by <i>-b’il</i> in Colonial Tzotzil..	449
Figure 189. Colonial Tzotzil intransitive resultatives in <i>-om</i>	451
Figure 190. Revised analysis of some forms classified as intransitive statives (resultatives)	454
Figure 191. Comparison of dictionary entries for two similar clauses in Colonial Tzotzil.	457
Figure 192. Classic Ch’olan quasi root-intransitive verb <i>uhti</i>	461
Figure 193. Verb stem <i>uht</i> with <i>-o’m</i> suffix.	461
Figure 194. Reconstructions of future (non-past) and past temporal deictic enclitics.	464

Figure 195. Entries showing variation in attested forms of temporal deictic enclitic -iji ∞ -i (ihi ∞ -i) among and within Colonial and Modern Ch'olan languages .	466
Figure 196. Alloforms of past temporal deictic enclitic in Tumbalá Ch'ol	468
Figure 197. Temporal adverbial enclitic -ij indicating time in future	469
Figure 198. Forms on time-period nouns indicating time in past and future in some Colonial and Modern Greater-Tzeltalan languages	471
Figure 199. Non-past or in-the-future temporal deictic enclitic in Classic Ch'olan . . .	473
Figure 200. Past temporal enclitic appearing on only one time-period noun in set: <i>haab'</i>	474
Figure 201. Usual spellings of past temporal deictic enclitic on time-period nouns. . .	474
Figure 202. Past temporal enclitic attached only to <i>winik</i> time-period noun	476
Figure 203. Non-past enclitic attached to one time-period noun but past enclitic to another	476
Figure 204. Distance number in reverse order except for <i>k'in</i> and <i>winik</i> information within one block.	477
Figure 205. Distance number in reverse order.	477
Figure 206. Long distance number with introductory glyph but in reverse order. . . .	478
Figure 207. Presence of non-past temporal enclitic in Long Count.	480
Figure 208. <i>Winikiy</i> written with short allomorph of past-temporal enclitic.	485
Figure 209. <i>Winikiy</i> with short and <i>haab'jiy</i> with long form of the past temporal enclitic.	485
Figure 210. Compound with past temporal enclitic attached to number with final <i>k</i>	487
Figure 211. Number with final - <i>n</i> and long form of past temporal enclitic.	488
Figure 212. Enclitic - <i>ij</i> indicating count points toward next date	491
Figure 213. Absence of temporal enclitic on time-periods indicates count toward next date.	493
Figure 214. Enclitic - <i>jiy</i> on distance number indicates count away from last date, but next date still preceded by <i>uhto'm</i>	497
Figure 215. Enclitic - <i>jiy</i> on distance number indicates count away from previous date but later date still reported using <i>uhto'm</i>	500
Figure 216. Common pattern with <i>i uhti</i> preceding later date after enclitic - <i>jiy</i> ∞ - <i>iy</i> on distance number indicates count away from previous date.	501
Figure 217. Distance number with count toward later date but no <i>o'm</i> suffix on <i>uht</i> . .	505
Figure 218. Distance number context with count toward later date but <i>uht</i> not present.	508
Figure 219. Two verbs at same point in timeline, one with - <i>o'm</i> suffix, other without.	510
Figure 220. Count toward later date with <i>uhto'm</i> but no - <i>o'm</i> on paired verb.	512
Figure 221. Passage including verbs suffixed by - <i>o'm</i> in non-distant-past context. . .	514
Figure 222. Date of earlier event explicitly tied into occurrence of period ending . . .	515

Figure 223. Passage including antipassive verb suffixed by <i>-o'm</i> in non-distant-past context.	519
Figure 224. Glyph collocations designated the ADI and PDI by J. Eric S. Thompson.	524
Figure 225. Examples of glyphs referred to as AEI (T125, T126) and PEI (T679).	525
Figure 226. Examples of “birth verb” easily misread if T126 interpreted as morphemic sign for anterior event indicator.	527
Figure 227. Examples of verb <i>uht</i> with both T679 ‘i and T126 <i>ya</i> affixes, apparently marking verb as both posterior and anterior event	528
Figure 228. Three of several occurrences of <i>i wal</i> on Copán Stela J.	531
Figure 229. Example of temporal deictic enclitic <i>-ijiiy</i> ∞ <i>-iiy</i> used on both time-period nouns and verbs with same function and in same passage.	536
Figure 230. Temporal deictic clitic <i>-iiy</i> used in <i>uhtiiy</i> clause referring back to previous event.	548
Figure 231. Relating later to earlier event by mentioning it again and attaching temporal deictic enclitic <i>-iiy</i> to verb	553
Figure 232. Temporal enclitic <i>-iiy</i> used with <i>cham</i> in clause referring to event reported earlier but not in immediately preceding sentence	558
Figure 233. Temporal deictic enclitic <i>-ijiiy</i> ∞ <i>-iiy</i> relating earlier to later event without mentioning it elsewhere in text	561
Figure 234. Examples of verb <i>than</i> (<i>t'an</i>) in incomplete, completive, and completive with deictic enclitic <i>-ihi</i> ∞ <i>-i</i> in <i>Paxbolon-Maldonado Papers</i>	564
Figure 235. Temporal deictic enclitic <i>-iiy</i> attached to a root (CVC) transitive verb compound referencing just-mentioned ruler.	569
Figure 236. Examples of two different grammatical forms of <i>ukab'i</i> in referential contexts	574
Figure 237. Past temporal enclitic indicating discursive back reference.	575
Figure 238. <i>Uhtiiy</i> sentence giving location of previous event.	580
Figure 239. Temporal enclitic <i>-iiy</i> in locative sentence that precedes dependent pronoun referring to it.	582
Figure 240. Temporal deictic enclitic <i>-ijiiy</i> ∞ <i>-iiy</i> used when adding information about quoted statement.	583
Figure 241. Temporal deictic enclitic <i>-ijiiy</i> ∞ <i>-iiy</i> indicating occurrence of event in distant past	587
Figure 242. Parallel passages on Quirigua Stela E using past temporal enclitic <i>-ijiiy</i> ∞ <i>-iiy</i> in narrating events in very distant past.	592
Figure 243. The ten occurrences of <i>acathanihi</i> in <i>Paxbolon-Maldonado Papers</i>	606
Figure 244. Only occurrence of temporal enclitic <i>-(i)hi</i> on <i>tz'ib'</i> in Acalan Chontal document.	607
Figure 245. <i>Acathaniy</i> variant of lexeme <i>acathanihi</i>	608
Figure 246. Only three occurrences of <i>acathani</i>	610
Figure 247. One occurrence of <i>acathane</i>	613

Figure 248. Verb compounds involving completive aspect marker <i>-i</i> in <i>Paxbolon-Maldonado Papers</i>	618
Figure 249. Past temporal deictic enclitic on root transitive verb	645
Figure 250. Past temporal deictic enclitic attached to derived transitive verb.	648
Figure 251. Passive verbs without any temporal enclitics	649
Figure 252. Passive verbs with temporal enclitic <i>-ijiiy</i> ∞ <i>-iiy</i> attached	649
Figure 253. Syllabic and logographic spellings of passive forms with long form of past temporal enclitic.	651
Figure 254. Two examples of <i>-VV₁y</i> mediopassive compounds (a) without temporal enclitic; (b) with past deictic enclitic <i>-iiy</i> attached.	653
Figure 255. Antipassive forms in <i>-V₁w</i> written using (a) wi ; (b) wa signs.	655
Figure 256. Antipassive form in <i>-V₁w</i> with enclitic <i>-iiy</i>	656
Figure 257. Antipassives in <i>-aan</i> (a) without temporal enclitic; (b) with enclitic <i>-iiy</i> attached.	658
Figure 258. Derived transitive verb further derived as antipassive in <i>-aan</i> with <i>-iiy</i> enclitic attached.	659
Figure 259. Positional in <i>-waan</i> (a) with no additional attachments; (b) with past deictic enclitic <i>-iiy</i> attached.	661
Figure 260. Positional in <i>-laj</i> (a) with no additional attachments; (b) with the past deictic enclitic <i>-iiy</i> attached.	661
Figure 261. Root intransitive verb (a) without temporal enclitic; with temporal enclitic <i>-iiy</i> attached.	662
Figure 262. Past enclitic on both distance number and verb <i>huli</i>	663
Figure 263. Past temporal enclitic attached to derived transitive verb inflected for resultative aspect.	664
Figure 264. Past temporal enclitic attached to irregular transitive verb inflected for resultative aspect	665
Figure 265. Rare example of past temporal enclitic attached to irregular intransitive verb <i>it</i> inflected for resultative aspect	665
Figure 266. Past temporal enclitic attached to gerund.	667
Figure 267. Past temporal enclitic attached to positional gerund.	668
Figure 268. Passive form with enclitic and unexpected harmonic vowel in last syllable used to write root	671
Figure 269. Passive suffix written with both ja and ji although only latter required.	672
Figure 270. Positional verb <i>wa 'laj</i> preceded by phonetic complement.	673
Figure 271. Participial form <i>wa 'an</i>	674
Figure 272. Usual way to spell <i>wa 'laj</i>	674
Figure 273. Variant spelling of <i>wa 'laj</i> plus past temporal enclitic.	675
Figure 274. Intransitive positional <i>wa 'wan</i>	677
Figure 275. Rare form of <i>wa 'l</i> with past temporal enclitic using ja instead of ji to write intransitive positional suffix.	679

Figure 276. Rare form of <i>wa'</i> with infixed ja instead of ji to write intransitive positional suffix.	679
Figure 277. Intransitive positional with ja and ji , but only latter required	680
Figure 278. Past deictic enclitic <i>-ijiiy</i> written explicitly in longest form.	682
Figure 279. Compound noun <i>ochb'i(h)</i>	683
Figure 280. Antipassive form <i>ochb'i[h]aj</i>	684
Figure 281. Antipassive form with past temporal enclitic attached: <i>ochb'i(h)jiiy</i>	684
Figure 282. Derived transitive verb inflected for resultative aspect with long form of past temporal enclitic attached: <i>ukab'jiiiy</i>	687
Figure 283. Derived transitive resultative with long form of past enclitic attached in context: <i>ukab'jiiiy</i>	687
Figure 284. Example of <i>ukab'jiiiy</i> from Tikal.	688
Figure 285. Long form of past adverbial enclitic on an intransitive positional verb: <i>wa'ljiiiy</i>	689
Figure 286. Multiple examples of temporal deictic enclitic <i>-ijiiy</i> ∞ <i>-iiy</i>	691
Figure 287. Spelling of “road” as bi-hi with <i>h</i> in Dresden Codex 65b.	698
Figure 288. Transitive resultative inflection plus past enclitic in Dresden Codex. . .	711
Figure 289. Examples of types of verbal tense and aspect prefixes expected in Classic-Period texts.	713
Figure 290. Proto-Ch'olan status markers reconstructed by Kaufman and Norman (1984).	715
Figure 291. Proposal of <i>ub'ah</i> (<i>ub'aah</i>) as candidate for verb displaying split ergativity.	716
Figure 292. Dance verb once interpreted as auxiliary verb attesting split ergativity. .	718
Figure 293. Sentence with <i>ub'aaj</i> referring to depicted image	719
Figure 294. Compound noun in <i>-taal</i> , sometimes suggested as positional incomplete inflection.	721
Figure 295. John Robertson's 1999 reconstruction of completive aspect for “Pre-Classic,” “Script,” and Ch'olti'.	736
Figure 296. Robertson et al.'s (2004) proposal for aspect and tense systems in Common Mayan.	744
Figure 297. Robertson et al.'s (2004:270) transition from Common Ch'olan aspectual system to Classic Ch'olti'an tense system.	745
Figure 298. Kaqchikel's “prepositional locative” form of progressive as described by Robertson et al. (2004)	753
Figure 299. Chart showing how Classic-Period present-past tense system “flipped” to Colonial Ch'olti' incomplete-completive system according to Robertson et al. (2004).	757
Figure 300. Past temporal enclitic used with distant past event but not with more current one.	786
Figure 301. Verbless sentence.	791

Figure 302. Example from Lulubo using “perfective [past]” with current moment as deictic center.	798
Figure 303. Example from Lulubo including shift to perfective (past) attributed by Andersen to reference point shifting to present moment.	799
Figure 304. Working Model of Linguistic Levels according to David Crystal (1987).	806
Figure 305. Comparative verb-suffix data adapted with one category elision and one addition to Ch’ol data (in brackets) from Houston et al. (2000a).	813
Figure 306. Reproduction of Houston et al.’s (2000a:332) Table entitled “Chronological overview of changes from Common Mayan to Ch’orti”	814
Figure 307. Alternate spellings of <i>k’ahk’ tiliw</i> , a Naranjo ruler’s name.	821
Figure 308. Mediopassive suffix <i>-ax</i> on verbs at Naj Tunich.	822
Figure 309. Chart of verbal affix shifts from positionals to passives reconstructed by Robertson.	832
Figure 310. Possible <i>chuhmaj</i> intransitive positional form as reconstructed by Robertson.	834
Figure 311. Parallel suffixing patterns on passives and intransitive positionals in Ch’ol.	846
Figure 312. Completive aspect suffixes in Colonial and Modern Ch’olan languages	852
Figure 313. Incompletive aspect suffixes in Colonial and Modern Ch’olan languages.	853
Figure 314. Attested Classic Ch’olan dependent person markers.	875
Figure 315. Different approaches to the same passage by Smailus (1975).	879
Figure 316. Ch’orti’ dependent person markers.	895
Figure 317. Theory of Set C development in Ch’orti’ offered by Robertson (1998). . .	900
Figure 318. Theory of Set C development in Ch’orti’ offered by Wichmann (1999). .	901
Figure 319. Focus antipassive form on K1398.	903
Figure 320. Classic Ch’olan independent pronouns.	904
Figure 321. Ergative (Set A) person markers in Colonial and Modern Ch’olan languages.	907
Figure 322. Independent pronouns in Colonial and Modern Ch’olan languages.	907
Figure 323. Absolutive (Set B) and intransitive incompletive (Set C) person markers in Colonial and Modern Ch’olan languages.	907
Figure 324. Chart illustrating proposal tracing development of Ch’orti’ Set C from Classic Ch’olan independent pronoun set.	910
Figure 325. Examples of different constructions using Set C pronouns in Ch’orti’. . .	914
Figure 326. Analysis and translation of passage containing Ch’olti’ <i>a-</i> temporal proclitic.	917
Figure 327. Proto-Mayan status markers reconstructed by Kaufman and Norman . . .	922
Figure 328. Proto-Ch’olan status markers reconstructed by Kaufman and Norman. . .	923

Figure 329. Reconstruction of Proto-Ch'olan transitive and intransitive status markers and nominal derivational suffixes.	927
Figure 330. Modal future (optative, subjunctive) in Acalan Chontal.	931
Figure 331. Modal future (optative, subjunctive) in Classic Ch'olan.	932
Figure 332. Modal future (optative, subjunctive) in Modern Chontal.	932
Figure 333. Modal future (optative, subjunctive) in Ch'olti'	933
Figure 334. Some uses and meanings of <i>xa</i> in Ch'olti'.	934
Figure 335. Future subjunctive in Tila Ch'ol	935
Figure 336. Modal future based upon verb meaning “want, desire” in Ch'olti' and Ch'orti'	937
Figure 337. Modal future based upon verb meaning “want, desire” in Chontal and Ch'ol.	937
Figure 338. Future constructions using verb “to go”.	939
Figure 339. Special future in Ch'ol.	940
Figure 340. Progressive aspect in Acalan Chontal.	943
Figure 341. Progressive aspect in Modern Chontal.	944
Figure 342. Progressive and “presente actual” constructions in Ch'olti'.	945
Figure 343. Progressive constructions in Ch'orti'.	945
Figure 344. “Actual” or “current” present constructions in Ch'ol.	949
Figure 345. Progressive aspect constructions in Ch'ol.	950
Figure 346. Some examples in context of <i>yuual</i> in Acalan Chontal document.	958

1 Introduction

1.1 Language and Society

1.1.1 Ethnography of Writing

It is Basso's (1989:431) contention that just as speaking, so could writing be investigated "as a dynamic component in the conduct and organization of social relations." In calling for an "ethnography of writing," he insisted "that the activity of writing, like the activity of speaking, is a supremely social act" (Basso 1989:432). Since this research pertains to an ancient culture, we can approach its language directly only through its writing. If Basso is right that writing is a "supremely social act," those written texts provide a window into the culture of the Classic Maya.

1.1.2 Dialogic Connection to Community

When Bakhtin (1981:277) refers to texts as "dialogic," it is this cultural connection that he has in mind.

The living utterance, having taken meaning and shape at a particular historical moment in a socially specific environment, cannot fail to brush up against thousands of living dialogic threads, woven by socio-ideological consciousness around the given object of an utterance, it cannot fail to become an active participant in social dialogue.

It is important to note the necessary connection to people, events, and texts that precedes and surrounds the formation of a given utterance or the production of a given text. The author does not create all this material nor invent all the ways of presenting it. Instead, the material, the language, and the words are, for the most part, already in existence. The author "can assume an artistic position only in relation to the given, determinate material" (Bakhtin 1990:262). Also, while some authors take more liberty with the language than others, it is really not possible, even at the level of the material,

for them to write or speak as if they existed in vacuums. The connections to the community, the society, other societies, and other individuals are always present and, at the same time, both restrict and provide possibilities.

All words are already pre-contextualized. No writer can really escape this contextualization. As Bakhtin (1981:293) notes,

There are no “neutral” words or grammatical forms, that is, words and forms that can belong to “no one;” language has been completely taken over, shot through with intentions and accents. For any individual consciousness living in it, language is not an abstract system of normative forms but rather a concrete heteroglot conception of the world Each word tastes of the context and contexts in which it has lived its socially charged life.

Keating (1997:266) provides concrete examples of how such words and forms not only reflect the status of members in a society, that of Pohnpei Micronesia, but also play an active part in creating and preserving it.

Through honorific speech, speakers generalize and humble the ownership of commoners (through the use of a general classifier and a humiliating one), and contrastively particularize and elevate that of chiefs (through more classifiers, through the incorporation of dominant and non-dominant possession in one classifier, and through the use of exaltive classifiers).

1.2 Grammar within Discourse-Centered Approach

1.2.1 Grammatical Abstraction

The only way to begin understanding an utterance, a text, or a performance is to enter into a dialogue with the author and with the author’s audience, times, and culture. However, as a “discourse-centered approach to culture” (Sherzer 1987:295-296, cf. Urban 1991) advocates, it is precisely discourse which is the “the nexus, the actual and concrete expression of the language-culture-society relationship.” But, except for the important

realms of non-textual archaeology and non-linguistic iconography, how can one enter into a dialogue with the Classic-Period Maya at all if one does not understand their language and its grammar? To the extent that we do not, their messages are in danger of being only partially understood, or worse yet, misunderstood.

Engaging in grammatical analysis necessarily involves the pursuit of abstraction. It is the need for a fuller, more complete understanding of the written language of the Classic Maya and its grammar that my research hopes to serve. An analytical grammar *is* an abstract, idealized view of a language. “It is clear from the start that system is obtained by way of abstraction, that it is composed of elements extracted in an abstract way from the real units that make up the stream of speech – from utterances. Any abstraction, if it is to be legitimate, must be justified by some specific theoretical and practical goal” (Voloshinov 1973:71). The theoretical and practical goal of this present research is to understand the verbal system or systems used in the Maya hieroglyphic texts, most of which were written over 1000 years ago, and to share that understanding with others interested in the languages and the messages imparted by those who used them.

1.2.2 Synthesis and Hyper-synthesis

While paying close attention to similarity and identity in forms and usage, the search for verb systems must avoid imposing an artificial unity which is not actually present. Premature or hyper-synthesis of the linguistic data can lead to spuriously synchronic views of Maya hieroglyphic grammar (cf. Wald 1994b, 2004a). A large amount of evidence that will be discussed later does indeed point convincingly toward the Ch’olan rather than the Yukatekan language family as that in which almost all of Classic-Period texts were written.

Some more recent viewpoints may be focusing prematurely and too narrowly upon just one or two grammatical morphemes present in the hieroglyphic texts while undervaluing the importance of the rest. Doing so runs the risk of excluding other very

closely related sister languages from the ancestry which they otherwise share. There is also a danger that this approach could be imposing a unity greater than is actually present in the texts themselves. Explaining variation by resorting to explanations such as the intrusion of vernaculars into a prestige *lingua franca* tends to diminish the value of the written language as a source for studying a real language, albeit in its written rather than its spoken form.

In this study, the written language will not be judged *a priori* to be a unified whole based upon an extremely limited number of grammatical characteristics. The individual examples of *parôle* will not be forced into a unified system or rejected as flawed simply because they do not match a predetermined *langue*. Similarities and differences among the Ch'olan languages and their apparent ancestor will be weighed against the intervening societal tumult and relatively long period of time between the writing of the last Classic-Period texts and the first alphabet-based texts of that language's descendants.

1.2.3 Balance Between Modern Language Sources and Actual Texts

The importance of paying attention to context is amplified because not all elements of the verbal complex may be present or recognizable in the closely related colonial and modern Mayan languages.¹ Although data and analysis based upon both oral and written narratives will be considered, the emphasis will be placed upon written accounts when possible because the Classic-period texts are all written. Likewise, the data from native writers and speakers will be given the greatest attention.

Neither can it be assumed in advance that the same or similar words or suffixes still have precisely the same meaning or usage. While the grammar and verb morphology of the existing related languages is of utmost importance as a starting point, the contexts of the morphemes in the original texts themselves must be the final arbiter. Especially

¹The English term "Mayan" as opposed to "Maya" will be used in this study to refer only to a specific language family or a reconstructed proto-language and not to a specific culture or its people.

when reference to current forms fails to yield unproblematic results, it is important to make close internal contextual analysis an active component of the investigation.

1.2.4 Grammar Beyond Sentence Level

In the process of grammatical analysis, it is very important not to harbor an overly narrow view of the relevant context. Voloshinov (1973:78) has lamented the approach of grammarians for whom “the structure of a complex sentence (a period) . . . is the furthest limit of linguistic reach.” It has been noted by several linguists that a context broader than just the immediate sentence often must be taken into account to understand how various elements such as shifters or deictics are used and what their full meanings are (cf. Silverstein 1976a; Hanks 1990). There are important grammatical elements in the hieroglyphic texts and in colonial documents written in closely related languages whose usage and presence can be adequately explained only in the context of broader discourse patterns that go beyond the immediate clause or sentence (cf. Hanks 1990; Josserand 1991, 1995, 1997; Wald 1998b, 2000a, 2004b).

1.3 Historical Analysis and Language Change

1.3.1 Proto-Language Reconstructions

Several of the proto-language reconstructions for the families closely related to those of the inscriptions were undertaken before glyphic decipherment had progressed to the point of being directly useful. Among them are Kaufman (1972) for Tzeltalan; Fisher (1973) for Yukatekan; Kaufman and Norman (1984) for Ch’olan, although published in a volume on Maya hieroglyphic writing; and Robertson (1992), likely independent of input from glyphic decipherment despite the date. A more extensive knowledge of verb morphology in the inscriptions should be of great interest for those wishing to compare it against the results of historical linguistics. While proto-languages are not expected to exactly match a particular language that existed at any given time, a certain degree of

similarity and especially compatibility is anticipated. The analysis undertaken here will include a comparison of the data with some of those reconstructions.

1.3.2 Some Relevant Issues in Historical Analysis

There are already a number of questions raised by current and past linguistic and epigraphic investigation that do not seem to be adequately answered within the framework of current theories of language change. These problems remain, even if one approaches proto-language reconstructions with due caution realizing that they are not necessarily meant to be identical to languages that actually existed as synchronic entities. One curious example concerns the relatively recent date of the split among the members of the Yukatekan language family, approximately A.D. 950 to 1000 according to Justeson et al. (1983:154; 1985:58-59). Although the language is thought to have existed independently over a relatively large area for at least 3000 years, McQuown (1967:202) suggests 4000 to 4500 years, there is no evidence of a split prior to 1000 years ago.

Another issue, just as puzzling but mentioned less often, is the presence of certain tenses and aspects in all the colonial and current members of the Ch'olan family although they are not usually reconstructed for Proto-Ch'olan (cf. Kaufman and Norman 1984; Robertson 1992). Some of these are formally similar in that they incorporate modified forms of certain adverbs but they are not always the same ones for the same tenses and aspects within the same language family or even in dialects within the same language.

Another problem is the presence of split ergativity – involving the accusative format in the intransitive incompletive – in all of the Ch'olan and Yukatekan languages although it does not seem to be present in the Classic-Period inscriptions at all (cf. Houston 1997). A related mystery is the seeming dearth or even absence of the expected incompletive aspect morphology in the inscriptions although it is present in four of the Ch'olan languages – Acalan Chontal, Modern Chontal, Ch'ol, and Ch'olti'.

None of these situations seems capable of being adequately explained within the traditional language-change paradigm. Recently, Robertson (1998) and Houston et al.

(2000a) have called into question the previously accepted approximate dates for the split in the Ch'olan family of languages and have ruled out all but the participation of Ch'olti'/Ch'orti' in the written language of the Classic Period inscriptions. It is worth investigating whether this conclusion is driven more by the restrictive nature of the traditional analytic paradigm than by direct evidence present in the Classic-Period texts. Since those views represent a drastic change from previously accepted analysis and because they have quickly gained acceptance from many in the field of epigraphy, they must be addressed in detail in this study.

1.3.3 New Paradigm for Language Change

Thomason and Kaufman (1988) have presented a view of how languages can be affected by contact with others. They argue that some of the resulting changes often cannot be adequately explained through system internal forces alone. Instead, the motivation is often sociological, that is, language external. While their central focus is on creoles, much of what they write is applicable to any situation in which people who speak different languages come into contact.

Dixon (1997) is in basic agreement but broadens the scope by providing an outline for an overall theory of language change which he encapsulates in the term “punctuated equilibrium,” circumscribing more directly the overall effect of outside forces upon language systems. These approaches to explaining language change hold the promise of a more accurate understanding of what is encountered in both the Classic, Colonial, and Modern Ch'olan and Yucatekan languages. The data gathered during this study will be examined in light of this new paradigm to evaluate its usefulness for answering questions such as those just mentioned and others that will be raised in this study. At the same time, the data from the Classic-Period languages along with that from research in related colonial and modern languages should afford a test of the theory's applicability to a language group other than those which inspired Dixon to propose it.

1.3.4 Strategies in Language Practice

Should the new paradigm proposed by Dixon prove to be more useful and accurate, it would represent the realization of the effect of strategy and practice, as outlined by Bourdieu (1977:3-9), not only upon how and why language is used, but also upon how language itself develops. Bourdieu (1977:22-30) perceived the inadequacy of a linguistic model that construed languages as governed completely by internal rules, independent of practice. For him, a language is not independent of received culture and modes of action which he refers to as “habitus,” that “system of internalized structures, schemes of perception, conception, and action . . . constituting the precondition for all objectification and apperception” (Bourdieu 1977:86, cf. 1990:52-65). This meshes well with Dixon’s (1997:15-44, 67-96) view that all manner of natural and social events can and do have a direct effect upon language change including which languages change, how they change, and the rapidity with which such change takes place. Changes that might take thousands of years in periods of equilibrium might occur in a few generations in periods of punctuation.

1.3.5 Further Ramifications of Dixon’s Model

Should Dixon’s model prove more accurate, it would follow that language change can be influenced and propelled by strategic and practical reactions to some of the same events and forces, both natural and societal, internal and external, that drive and affect the content and form of the messages and texts that are written in that language. Instead of two completely different realms within discourse, neither of which react to the same types of influences, both the form and the content, both the grammar and the message of that discourse would then be revealed as two closely related entities, inseparable in practice, and subject to many of the same societal and linguistic forces, albeit each in its own way.

Both language change and language use would then prove to be dictated less by abstract internal rules and more by language-external events and reactions to them than previously thought. Nevertheless, certain regularities have been noted especially in the

types of changes that take place under certain conditions. These will be used as a guide in interpreting the data found in the inscriptions and in placing it into the overall scheme of development of the related languages.

Although there has been some movement recently toward accepting models of language change similar to Dixon's, practical applications acknowledging such rapid changes and illustrating the nature of such developments have naturally been lagging behind. After examining the details of some of the verb morphology of the Classic Texts and comparing it to that of its Colonial and contemporary descendants, the basic changes that have taken place will be examined in light of this new theory. It is hoped that this investigation will help to illustrate in practical terms some of the limits of comparative analysis while acknowledging its importance as well. At the same time it should provide a practical example of historical influences on languages and language change that goes beyond the limited sphere of lexical borrowing.

1.4 Verbal Complex

1.4.1 Importance of Verb Morphology

While it is important to clarify which languages were written in the Classic-Period inscriptions and which view of language change is more likely to be correct, the central topic of the dissertation will nevertheless be its grammar, particularly that of its verbal system. If the interpretation of the texts of the inscriptions provided by epigraphers is to be taken seriously by those not directly involved in epigraphy, their precise grammar must be demonstrable.

To simply recognize the participants and to identify in general the type of action, is, to be sure, very important. However, until one knows precisely how the action itself is expressed, whether the named participants are agents or patients, whether the events are reported as past or present events, whether the action is being looked at as a whole (completive) or being viewed as underway at a specific time (incompletive), among other important grammatical meanings, one cannot feel comfortable with any broader

anthropological and historical conclusions based upon the written record. Until the patterns of discourse are fully explained and clarified, ethnographical and historical conclusions about the Classic Maya based upon them cannot be assured of a secure basis in the texts themselves.

1.4.2 Verb Morphology and Ethnographic Interpretation

At first glance, questions about verb morphology may seem somewhat esoteric to non-linguists wishing to interpret the message content of the hieroglyphic inscriptions. Instead, they are of fundamental importance for both linguistic and ethnographical issues. Just one of many examples comes from a recent proposal by Houston (1997) that most of the verbs on the main time line are inflected for the incompletive aspect. When presenting the implications of that interpretation, Houston (1997:299-300) and Stuart (1996:165) translate these verbs as “present” or “historical present” tense in English and imply that the inscriptions were meant to be performed rather than simply read as accounts of past events. Such a reading would seem to signal that the texts are more compatible with “folkloric” rather than “historical” accounts. Others, for example, Joyce Marcus (1992:xviii) view them more as “myth, lies, and propaganda” rather than as “history” and indeed nothing like the “historical truth” Westerners receive from such sources as “the *Washington Post*.” It may also be that the choice of aspect to use is dependent not upon the type of message being presented or its genre but rather upon the speaker or writer’s perception of the narrative as in progress rather than complete.² In any case, these examples alone already suggest that how verbs are read, analyzed, and interpreted does indeed have significant repercussions.

²The suggestion of this as a possibility is based upon a comment made by Nora England (pers. com. 2007).

1.4.3 Verb Morphology and Genre

What is really important here, however, is not deciding whether the texts in question are folklore, myth, history, or a combination of them all, however one interprets those categories. Instead, in order to more adequately understand the written message, it is important to ascertain the genre or genres a particular text encompasses (cf. Bakhtin 1986). Even more than that, the characteristic types of genres themselves must be gleaned from the original texts. Every effort must be made to ascertain the features and characteristics of the various genres in the inscriptions be they history, religion, a declaration of an object's owner, or new types that do not fit well into predefined slots. Just as other large bodies of literature, the Classic Maya inscriptions contain a variety of genres.

One of the fundamental factors that might have a bearing upon determining a genre's character is the correct interpretation of the verbal forms. It is primarily that basic level of understanding that this dissertation is intended to address. Until such issues are adequately treated, answers to some of the more broadly interesting questions remain speculative at best, mistaken at worst. After these and other basic issues have been resolved, it will be easier to proceed toward a more complete characterization of the genres in the hieroglyphic texts and to profit from the insights these texts give us into the practices, politics, and life of the Classic Maya elite.

1.5 Methodology

1.5.1 Context and Morphology

Stressing the importance of context is not meant to be simply an abstract admonition to follow in the course of research and analysis. Throughout this study mention will be made of specific examples in which insufficient attention to context has led to misinterpretations. At this point, the purpose is to emphasize the importance of context in interpreting verb morphology and to outline steps that have been taken during research and analysis to ensure it has been taken into account. Misinterpretations have

sometimes come from searching the hieroglyphic texts for suffixes, which then tend to be equated too precipitously with similar or even identical suffixes in existing Colonial or Modern Mayan languages.

Since there are only a limited number of suffixes that can occur and these are sometimes used differently in distantly related and even closely related languages, more than just a physical resemblance or identity must be established. To avoid these and similar problems, there will be several remedies applied in this study to minimize the danger of misidentification. First, morphological and inflectional interpretations will be subjected to rigorous contextual control. They must be shown to work in context to be accepted as valid. If they cannot be, the interpretation remains mere conjecture. Second, an attempt will be made to find multiple examples of the same verb with the same endings in order to compare the contexts. If the contexts are similar and the hypothesis works in both situations, its identification as a particular form will be considered more secure. Finally, if other verbs occur with the same forms and in contexts that are similar, an even greater level of assurance will be accorded the analysis.

1.5.2 Use of Colonial and Current Language Information

The emphasis in this dissertation is on evaluating all the evidence as it presents itself in context, not on finding enough evidence to support a particular view of what the grammar should be. Still, reference will be made constantly and consistently to the forms and patterns that appear in the extant Colonial and Modern languages and the proto-languages reconstructed by linguists. It has been not only advantageous but also necessary to study the Modern and Colonial languages to gain insight into the verb morphology and grammar of the inscriptions.

However, it is ironic that overdependence upon such sources has fairly often led to misinterpretations and barriers to further progress. Instead of focusing on the content and context of the inscriptions, there has sometimes been a tendency to prolong searches for elements discovered through linguistic research in Colonial and Modern languages

that proved later to be nonexistent. This has sometimes led to readings and interpretations that have been shown later to be invalid in light of other new phonetic or morphological discoveries. Sometimes, information from linguistic studies influenced what was expected and was therefore presumed to be represented in the script despite lack of attestation.

1.5.3 Consideration of Items Outside Verbal Complex

Although the verbal complex and its related grammar will be the central focus of this study, it must also take into account other data that have been used in the past for decisions regarding the languages of the hieroglyphic inscriptions. For example, while the emphasis will be on differences in grammar and morphology, differences in lexicon cannot be ignored. However, unevenness in the resources available for lexical information in specific languages makes it difficult, if not impossible, to use the simple presence of a word in one language and its absence in another as evidence for language identification. Also, languages often borrow words from others, especially if they are located in close proximity to each other. That borrowing itself can be important for establishing a direct or indirect contact with another culture and language. Especially when the choice is among several closely related languages, its practical application for identification only becomes viable when a large amount of data is evaluated and then only in conjunction with other factors.

Lexical data becomes more relevant when used in conjunction with evidence of certain sound changes. However, even then, such arguments must be evaluated in light of the possibilities of both retention of earlier forms and borrowing that might have taken place after certain sound changes occurred. Here again, isolated words only become important for language identification when viewed in the context of a large set of lexical data. If only relatively few examples contradict the overall trend, it is likely that some other factors are at work. For example, there seems to be a greater retention of earlier, pre-sound-change forms in names of individuals and polities and in certain ritual or

religious vocabulary. One must attempt to find reasons for those exceptions, but they alone cannot be made the driving factor in making language identifications.

Certain lexical items, however, are more important than others for identifying the language of a body of texts. Lexical items that carry more weight, for example, are the names used for the days of the 260-day calendar and the “months” in the 365-day calendar. That many of them represent syllabic spellings of pertinent words in one language but not in another provides a relatively strong argument for language identification. If in those circumstances one decided in favor of a different language in which the syllabic spellings of the names did not match or were not phonetically compatible, powerful counter-evidence would have to be otherwise provided. Among other arguments, one would have to provide a rationale as to why the names were borrowed from speakers of a different language.

Not all of these types of evidence will be specifically examined in this study. Having already been sufficiently argued by others, they will instead be relied upon as an existing foundation or background that has helped to guide this present research along a specific path. Because of the weight of this earlier research, greater attention will be given here to the Ch’olan family of languages and their close Tzeltalan relatives.

1.5.4 Descriptive Approach to Grammar

One way to make it easier to share the results of this study with other researchers whether linguists or epigraphers, is to maintain the concepts and terminology generally used by others in closely related fields. In light of that concern, the generally accepted approaches to descriptive grammars and the terminology used for them that is common among linguists involved with Maya languages will be employed (cf. Dayley 1981; Campbell 1984; Kaufman & Norman 1984; England 1988, England and Elliot 1990; Robertson 1992). There will, of course, be slight differences of opinion as to how to classify some particular elements as there are indeed differences among these linguists themselves. When such differences are apparent, the reasons for choosing a particular

term or classification will be discussed. A similar approach will be taken in regard to the terminology used by epigraphers, many of whom also employ much linguistic terminology as well (cf. Schele 1982; Bricker 1986; MacLeod 1987; Stuart 1995). Again, while following in general the terminology used by them, there will also be differences of usage that may require clarification.

1.6 Scripts in Mesoamerica

1.6.1 Central Mexican Scripts

According to evidence found so far, Mesoamerica is the only area in the Western Hemisphere for which the existence of complex, non-pictographic, phonetic Pre-Columbian writing systems has been demonstrated. There are early Olmec and Epi-Olmec carvings that include somewhat abstract figures that may be writing, but not enough progress has been made in interpreting these figures to advance this hypothesis beyond the level of speculation.

There are texts that contain words or parts of words written in Zapotec, Mixtec, and Nahuatl. Most of these are in codices dating to shortly before or after the arrival of the Spaniards. However, there are many earlier examples of Zapotec writing on carved stone and painted murals especially at Monte Alban. There is confirmation in these languages for phonetic and even syllabic elements rather than only pictorial writing (cf. Smith 1973a; 1973b; Nicholson 1973; Moser 1977; Marcus 1980; Berdan and Anawalt 1992; Justeson and Kaufman 1993; Kaufman and Justeson 2001). However, in the extant Nahuatl and Mixtec codices, the phonetic portions are ancillary to the main texts which are mainly pictographic. In all of these sources, the syllabic script seems to be used mainly in place names, personal names, and in a few other contexts, although further research or discoveries could prove otherwise. So far at least, no extended narrative texts have been identified that rely exclusively or even mainly upon syllabic signs (glyph equating to syllable) or even logographic signs (glyph equating to word) rather than simply pictorial representations.

1.6.2 Isthmian (Epi-Olmec) Script

There are two mainly or entirely phonetic Mesoamerican writing systems that use both syllabic and logographic signs to write relatively long texts.³ These are the Isthmian and the Maya hieroglyphic writing systems. The decipherments and interpretations of several Isthmian texts by Kaufman and Justeson (2001) based upon Proto-Zoquean have been promising and productive. One of the texts, known as the “La Mojarra” stela is quite long (cf. Winfield Capitaine 1988) and a few other carvings using the same script have also been found. However, some have disputed Kaufman and Justeson’s decipherments, among them Anderson (1993), Houston (1996), and Houston and Coe (2003). Unless much more becomes available, it will be very hard to further verify the accuracy of the current interpretations, much less to compile an extensive grammatical analysis of the written language and its verbal system.

1.6.3 Mayan Language Script

Only the Maya area has so far yielded an extensive body of texts written in a phonetic script. Many of these texts are still extant in the form of carved and painted inscriptions on stelae, panels, and walls; incised and painted ceramics; and painted books. Although none of the known extant copies of the books date from the Classic Period, at least one of them, the Dresden Codex, contains texts written in the same language as the Classic-Period monumental script (cf. Wald 1994b, 2004a).

The Maya script is unique among pre-Columbian writing systems in providing thousands of texts written with the same basic sign system. In fact, new texts are regularly found at various sites in Mexico and Central America. Although the differences from other Mesoamerican systems are more of degree than kind, if only by their sheer

³ “Phonetic” is here used in the sense of a script that is made up of elements that are used to represent sounds. The phonetic elements in the case of these two languages are either syllabograms, signs representing syllables, or logograms, signs representing words – not ideas or things. The usage of these terms will be explained in more detail later.

numbers, these texts provide the critical threshold beyond which insights into verb morphology and other grammatical details of a language become an attainable goal and a profitable area of study. That availability plays a key role in making the type of research that has been undertaken here possible.

1.6.4 Academic Interest in Maya Hieroglyphic Writing

Although the study of Maya hieroglyphic writing has garnered attention from representatives of various academic fields and even from the general public, it has generally garnered less interest within the departments of linguistics and linguistic anthropology. There are several possible reasons for this. One is that most societies targeted for anthropological research, especially in the Americas, did not have writing systems before the Spanish invasion. For many of them, such writing systems have not been important in the past although this disinterest may be currently changing. Even when concentrating upon the area inhabited by speakers of Mayan languages, only a few of them can demonstrate the existence of pre-Columbian writing systems, that is, the Ch'olan family and, by extension to its parent, the Greater Tzeltalan family, and the Yukatekan family. Although some researchers postulate a pre-Columbian writing system for the K'iche' (cf. Tedlock 1996:25), no examples of such writing have been found. Instead, the only evidence so far is a passage written using the Spanish alphabet in the *Popol Vuh* that could be interpreted referring to its existence (Tedlock 1996:63).

A second possible reason for its lack of appeal in the fields of linguistics and linguistic anthropology is that writing systems have generally been the provenance of the more elite members of societies. Evidence indicates that this was also true of Maya hieroglyphic writing and that literacy was limited even among the Classic-Period Maya (cf. Houston 1994:40). However, from its very beginnings, most ethnography has concentrated on less developed societies whose languages had never been written. Even within such societies, the less formally educated often became the main target of such

study. Also, because the elite are, by definition, fewer in number and so less representative of society as a whole, they are less apt to be investigated by ethnographers.

Third, it is also quite understandable that currently-living languages garner the main interest of both linguists and linguistic anthropologists. Despite the texts available for studying Maya hieroglyphic writing, the data on living languages can be expanded more easily and also interactively directed along paths to address specific areas of interest and to resolve specific questions.

Fourth, although historical linguists have a more active interest in exploring the nature and content of ancient written texts, it has in the past required a substantial amount of specialized knowledge and time to become proficient in reading the texts. However, considering the great advancements made in decipherment over the past three decades, that hindrance is not as great as it once was.

1.6.5 Value of Maya texts for Linguistics

In this study, I hope to show that pre-Columbian texts can be of great importance both for tracking the historical development of the represented languages and for appraising both the results of historical linguistics and comparative linguistics. In order for those not acquainted with the Maya hieroglyphic script to realize this is possible, it must be understood that this script actually allows us to grasp in phonological, morphological, and syntactical detail the language it represents. It does this as well as most other scripts and even better than some using an alphabet.

A comparison with the English writing system comes to mind. Although based upon an alphabet, the script used to record English is notorious for its lack of accuracy in representing the current spoken language. Its recalcitrant retention of spellings that preserve much older historical pronunciations has resulted in a writing system that often requires learning arcane spelling rules and even memorizing a large number of individual words to master. Instead of relying on the written representation, one must look to history to understand why they are written in a certain way but pronounced differently.

Only the advent of computerized spell checkers has somewhat meliorated the problem. Compared to this, the Maya hieroglyphic system more accurately represents the currently spoken related languages despite the fact that the examples we have of recorded oral descendant languages date from 500 to 1000 years later.

2 Characteristics of the Classic-Maya Writing System

This section is intended to serve several purposes. In order to provide an introduction for those new to the study of the Classic Maya script, changing views of its character over the past 150 years will be briefly reviewed. Next a summary of current interpretations of its sign system will be presented. Although the position taken in this present study is in general agreement with those views, the signs sometimes behave in ways that do not appear to be addressed within the confines of the generally accepted analysis of their characters.

The more traditional essential approach to the characters or values of the signs tends to describe them in terms of general inherent characteristics. Such an approach tends to create two neatly divided groups, logograms and syllabograms. The approach taken here will be to analyze those signs from a functional standpoint. It will stress how the signs of the system actually function in context. This analysis will provide evidence of several characteristics which the members of both groups share that would seem to be features belonging exclusively to the other. It will also provide evidence of substantial differences among some of the signs of the same group. Finally, it will point out examples of some signs, the characteristics of which are not adequately revealed within the accepted logogram-syllabogram division.

As already noted, emphasis will be placed upon how the signs actually function in practice rather than upon concepts abstract enough to generally place the Maya Script within the overall category of logosyllabic scripts. Next will follow an explanatory view of the nature of the signs used in the system. Not all types of attested signs will be addressed nor will all of the signs that fit into each category be presented. Instead, the intent is to address those signs and groups of signs that provide an overview of the possible types and to include especially those that appear to be important for establishing how the system functions as a whole. The goal is to provide an explanation of how it is that the system could function so well especially from the standpoint of the reader. This functional perspicuity is meant, in turn, to provide additional retroactive confirmation of

the legitimacy of the overall characterization of the sign system being presented in this study.

This proposal concerning the Maya writing system's practical functionality should not be misconstrued as being in conflict with various methods that might otherwise be advisable when approaching an undeciphered "hieroglyphic," "pictographic" or "logographic" script for the first time. In such circumstances, measures must often be taken to preserve objectivity and avoid premature judgments as to how a particular system might operate. However, once the elements of the system are better understood and extensive advancements in decipherment have been made, such preliminary safeguards might best be viewed as preparatory to a more complete description. More important at this later stage is achieving a better understanding of how the particular system might have actually functioned for those who used it. For example, they may not have been especially interested in providing the capability for speakers of a different language to plug their own words into a logographic representation, as is sometimes proposed as a reason for employing logograms. If that is true, there might be signals in the system itself indicating such a disinterest. It is at that level of investigation that the following presentation should be understood to belong.

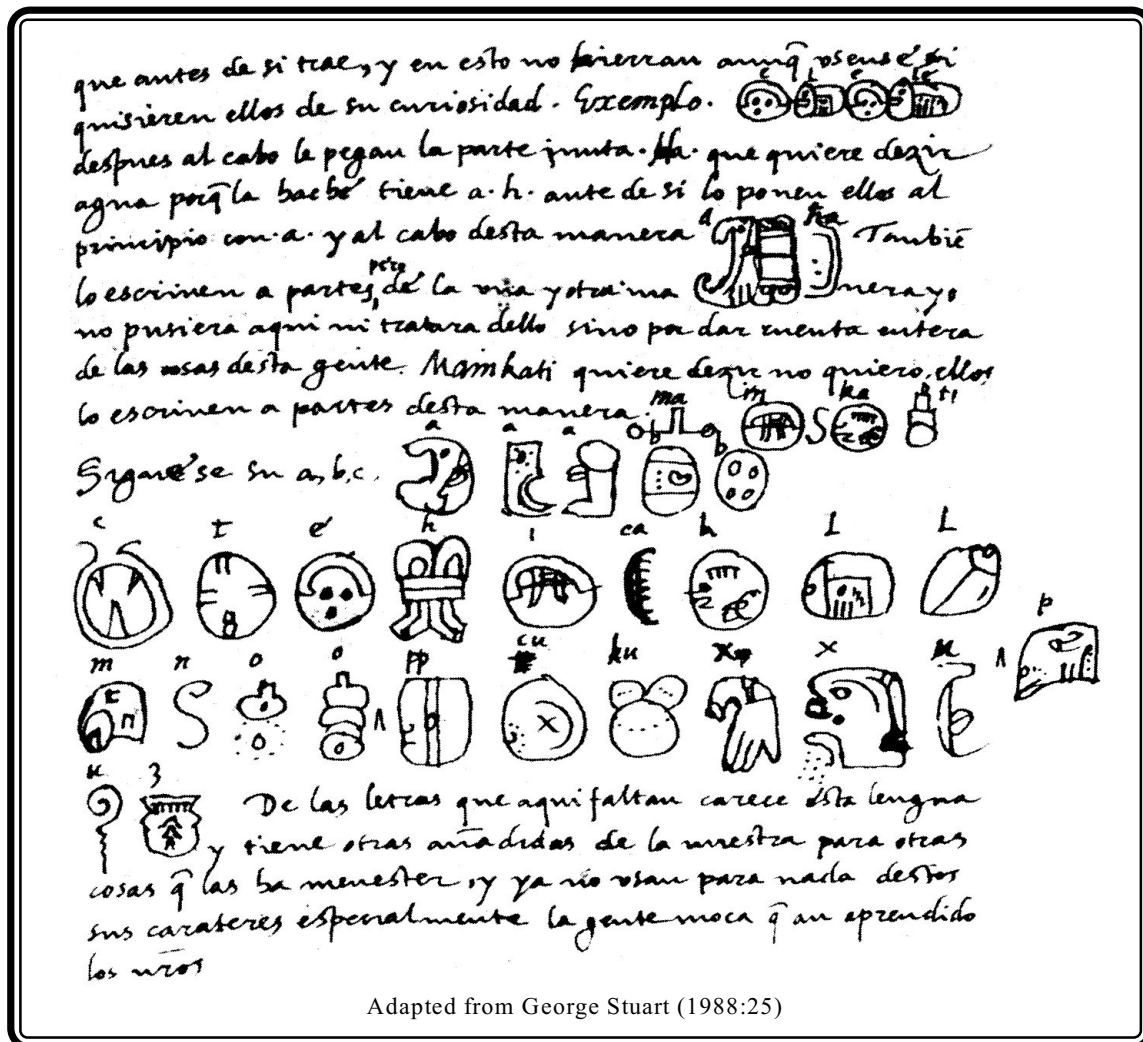


Figure 1. Copy of de Landa's "Alphabet" from Photograph by Juan de Dios de la Rada y Delgado

2.1 Phoneticism

2.1.1 Early History of the Proposal

Thirty-five years after the death of the great ethnographer, epigrapher, and Mayanist, Sir J. Eric S. Thompson, who is known for eschewing the characterization of the Maya hieroglyphic script as "phonetic," hardly any involved in the field doubt that it indeed is. Gaspar Antonio Chi provided the phonetic equivalents shown in Figure 1 to

Diego de Landa's alphabetic Spanish letter names sometime prior to 1566 (cf. Tozzer 1941; George Stuart 1988; Houston et al. 2001b:29). After the discovery by Brasseur de Bourbourg in 1863 of what is probably a summary of Diego de Landa's original manuscript, several scholars in the late 19th and early 20th centuries, including Léon de Rosny (1876a, 1976b), Daniel Brinton (1882), Cyrus Thomas (1882), and Benjamin Whorf ([1933] 1975), among others, argued at least for its partial phonetic character. However, it was not until the early 1950s that Yuri Knorozov provided enough evidence for the phonetic character of the script that others such as David Kelley (1962, 1976) and Floyd Lounsbury (1973) were inspired to take up the cause.

Very soon, Peter Mathews and Linda Schele (Mathews and Schele [1973] 1974) continued employing Gaspar Antonio Chi's syllabary and filling in or verifying some that had not been securely deciphered. Not long thereafter, other epigraphers, including John Justeson (Fox and Justeson [1978] 1980), Barbara MacLeod ([1983] 1987), David Stuart (1987), Nikolai Grube (1987), and Stephen Houston (1989b), among others, securely deciphered many more syllabograms or added secure arguments for the values of others. The publication of *Phoneticism in Mayan Hieroglyphic Writing* (Justeson and Campbell 1984) marked a sort of watershed, since around that time it ceased being necessary to demonstrate the script's phonetic character and time could be spent instead progressing forward within that paradigm.

2.1.2 Posing the Question

Yet the mere acceptance in general of the phonetic character of the Maya script leaves a number of issues unclear and a number of questions unanswered. What does it mean to call a writing system "phonetic"? Many have described the Maya script as made up mainly of logograms (signs representing words) and syllabograms (signs representing syllables). Are syllabograms to be considered phonetic and logograms not; or are both of them phonetic? What is the meaning of "phonetic" that allows one to take either stance. Further, how are ideograms – if indeed such exist at all (cf. Coe 1999:25) – related to

logograms. What is more, how do pictograms or pictographic writing fit into this scheme?

2.1.3 Thompson and Diego de Landa's "Alphabet"

Although J.Eric S. Thompson is often faulted, along with others, for holding up the progress of decipherment by clinging vociferously to the ideographic nature of Maya hieroglyphic writing, there are statements he made and approaches he took that clearly separated him from other more recent proponents of ideograms (such as, for example, Longhena and Giammanco Frongia 2000). Surprisingly, Thompson (1950:46) states the following about the elicited Landa "alphabet" (my emphasis):

"...Landa pronounced the letters of the alphabet to an educated Maya, and the latter drew a **glyphic element which resembled the sound. . . . Maya symbols** appear usually to have **represented words**, occasionally **perhaps syllables** of compounded words, but never, so far as is known, letters of the alphabet.

It appears that, despite his other statements to the contrary, Thompson had indeed noticed something with which even the phoneticists could agree. In fact, he goes on to state:

I myself have found the Landa alphabet of some value and confidently expect that it will be of aid in deciphering other elements, although in a manner very different from that which Landa supposed. (Thompson 1950:46)

In other words, it was not an alphabet but contained instead "...words, occasionally perhaps syllables of compounded words," and this Thompson intended to use in decipherment. But if Thompson recognized the Maya signs as representing "words" and "syllables," was he not already admitting to phoneticism?

2.1.4 Thompson and “Rebus Writing”

Thompson actually describes “rebus writing” in a way that seems to indicate a phonetic approach. “The use of homophones (words with similar sounds but different meanings) seems to have been fairly general among the Maya.” So he finds, for example, that the “moon sign and frog are interchangeable in the glyphic texts presumably because their names were once phonemes in the lowlands. . . .” (Thompson 1950:48).⁴ In another example, he notes:

The glyph for *Bolon Yocte* presumably supplies another instance of rebus writing. The name probably means “Nine Strides,” but *oc*, “stride,” is represented by the head of the dog used for the day *Oc* (Thompson 1950:47).

This is a clear indication that he understood the target of rebus signs to be a particular set of sounds and not a connection to be made through concepts. Homophones *sound* the same. The connection between the pictorial aspect of the sign and its correct decipherment was patently phonetic. So did he consider such signs to be rare in the script? Evidently not, judging from this statement: “There are excellent grounds for affirming that the Maya made much use of this kind of writing (Thompson 1950:48).”

I believe a strong case can be made that Thompson was often right in some of his decipherments precisely because he both used Gaspar Chi’s information (for example, to connect the ’u glyph with the 3rd person singular dependent pronoun *u*) and recognized the phonetic character of rebus signs. In a very telling statement in 1971, twenty-one years later in the 3rd edition of his *Maya Hieroglyphic Writing*, Thompson (1971:vi) says his new decipherments “have been to a considerable extent of the kind called rebus writing I am convinced that wherever possible the Maya used that system. . . .”

⁴His actual decipherment of the signs as *po* in this particular instance proved, however, to be incorrect.

2.1.5 Thompson and Ideograms

Instead of seeing the light based upon his own evaluation of the reason for his successes, Thompson still clung fiercely to many ideographic readings and refused to give up his inflated assessment of their value. He opposed syllabic decipherments in general, even at the cost of holding rather contradictory views on particular glyphs. For example, we have just excerpted from his interpretation of the glyph depicting a dog as *oc* (*ok*) but used as a homophone without direct connection to the idea of “dog.” Still, he had this to say about “dog glyphs” and their ideographic nature:

If a dog glyph appears sometimes in a context which suggests fire, but at other times in one indicative of death and the underworld, we must pore over the vast body of Maya and Mexican religion to seek a link connecting these different concepts. . . . From the study of the known glyphs a fair vocabulary, or, rather, list of ideographs and symbolic concepts, can be garnered, and this can be tested on glyphs of unknown meaning (Thompson 1950:35).

Perhaps he caught himself in this type of contradiction by 1971 since, after noting that practically all his progress centered around rebus glyphs, he hurries on to caution: “. . . but they also used metaphorgrams, ideograms, and determinants and in some cases a glyphic element might be used **both phonetically and ideographically**” (Thompson 1971:vi, emphasis added).

In the end, the main problem with Thompson’s ideographic approach may have been the convoluted string of connections he would sometimes make to arrive at the supposed

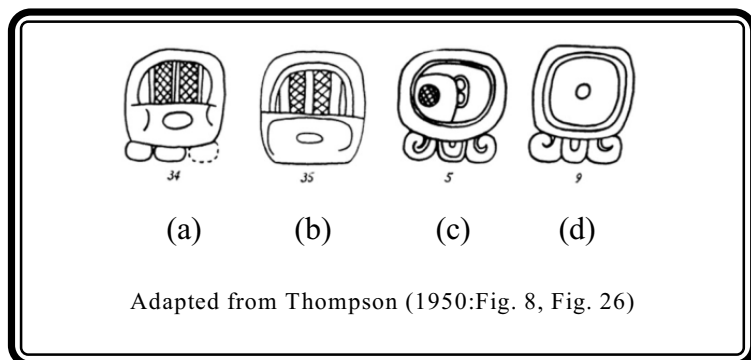


Figure 2. Thompson’s “TUN” and MULUK signs.

“meaning” of a glyph. One example among many that he presents involves what Thompson calls the “**TUN**” sign (Figure 2a-b) and the sign for the month **MULUK** (Figure 2c-d). The argument is too long to quote in full but the main points are reproduced here, to serve perhaps more as a cautionary tale:

Glyphs for the *tun* (year of 360 days) supply interesting examples of ideographic writing. . . . One of its elements is the sign for jade. Jade was “the precious thing” and . . . a ritualistic name for rain or water because rain was so essential for the crops. Thus the use of this jade symbol in the *tun* sign once more demonstrates the association of the year with the rainy season. . . . [It] is also used to form the day sign *Muluc*, which corresponds to the Aztec day *Atl*, “water”. Again the day *Muluc* has as its guardian the *xoc* fish. This *xoc* fish . . . is used as a rebus for *xoc*, “to count.” . . . Water and the *xoc* fish were already closely connected through their identification with the day *Muluc*, and perhaps because the *xoc* deity also sent water to mankind. (Thompson 1950:49)

Note that the problem here is not with the attempt to make connections among the items mentioned by Thompson within the culture and iconography of the Classic-Maya or even within the pictorial content of the glyphic signs. The problem is with his attempt to equate these connections with the **meaning** of those signs **within the writing system**. This ideographic approach exemplified by Thompson is indicative of one that views the signs in isolation from how they are actually used in practice in actual texts. Even though he designates his “*xoc*” sign here to be a “rebus,” he fails to realize that all that is required for a sign to be used in this fashion is that its value corresponds to a homonym or near homonym of another word. It does not require that there be any direct, conceptual, or etymological connection. This misapprehension represents what can happen when one approaches the signs of the system from a purely essentialistic standpoint abstracted from

how they are actually used to reproduce in writing a message that an author wished to convey.

2.1.6 Thompson and Whorf

One might be tempted to write off Thompson's (1971:vi) dismissal of what he called Knorozov's "between syllabic and alphabetic" approach to his reluctance to give in to a "Marxist-Leninist approach" or having to make good on his promise to "make a pilgrimage to Marx's grave" if a phonetic system were the answer. However, Thompson's assessment of Whorf's attempts were hardly less harsh. Coe (1999:139) rightfully points out that Thompson's approach to Whorf's writings on the phoneticism of the Maya script was to go "for the jugular" and that he took "three of Whorf's weakest cases" to easily refute. But Thompson's most telling statements may not be his attempt in "skirting the truly important part of the Whorfian message, his general statements about the probable nature of the script" as stated by Coe. Instead, Thompson (1950:311) states that he had no objections to Whorf's view of the overall nature of the script.

My objections to Whorf's writings are not against his conclusions as to the nature of Maya hieroglyphic writing, but against his lines of reasoning. I feel that he has built his structure on the shifting sands of false premises with the aid of a scaffolding of misidentifications. That the structure contains some good stone is not improbable.

Again, what seems surprising, given Thompson's stated proclivity for ideographic interpretative chains, is his oblique acceptance of Whorf's overall approach "as to the nature of Maya hieroglyphic writing." Still, we have already seen that he both accepted the usefulness of Diego de Landa's "alphabet" and its content of both words and, in Thompson's own words, even "perhaps syllables." Nevertheless, he faults Knorozov

with the words “Like Whorf, he has great confidence in the Landa alphabet” (Thompson 1960:vi). What is more, his evaluation of rebus signs is that they are phonetic.

Of course, Thompson was perturbed at Whorf’s lack of knowledge both of the glyphic signs and the contexts in which they occur. However, what really seems to form the basis of his scathing criticism, given Whorf’s status as a renowned linguist, was his lack of knowledge of the Mayan and other Mesoamerican languages. He warns against neophytes intruding into a field to provide solutions or keys for reading the Maya script without the in-depth background he possessed of both the script itself, of the Mayan languages it likely represented, and of the culture that produced this script. “Whorf’s writings are a direful warning to those with a similarly uncritical approach to the hieroglyphic problems” (Thompson 1950:313). Thompson’s refutation of Knorozov’s more substantially developed claims often take a similar tack (cf. Thompson 1971:vi).

2.1.7 Logograms versus Ideograms

Michael Coe (1999:25) has argued that no scripts are based upon ideograms and that what are usually called ideograms are really logograms. Turning to a seemingly disinterested source, just how would one define a logogram and how would it differ from an ideogram if one did exist. David Crystal (1992:179) defines an ideogram as “A symbol used in a writing system to represent a whole word or concept.” He further notes that ideographic writing “is usually distinguished as a later development from pictographic. Ideograms have an abstract or conventional meaning, no longer displaying a clear pictorial link with external reality” (Crystal 1992:179). As we shall see, many Maya signs have a very recognizable pictorial link “with external reality,” but does that really make them pictograms? It will also be argued that many Maya glyphs write whole words, but does that make them “ideograms?”

Consider also Crystal’s (1992:179) definition of “logogram” as “[a] written or printed symbol which represents a word (or morpheme) in a language.” He then follows it with a warning that it “must be used with care as it suggests that only words are

represented by the symbols, whereas meaningful parts of words (e.g. affixes, roots) are also included in the notion.” Michael Coe (1999:27) takes this warning even further arguing that “a logogram is a written sign which stands for a single morpheme, or (rarely) a complete word.” This does seem strange since “logogram,” is originally based upon Greek *logos* “word.” More important here, construing a logogram as standing for “a single morpheme” and only rarely “a complete word” does not seem to be a good fit for the Maya script. Instead, I will argue that many logograms write words and only a few are used to write non-lexical morphemes such as affixes and enclitics at levels lower than words or word roots. However, it should also be added that this may have more to do with whether or not suffixes in the language share the same sounds with words that can be representationally depicted. It may be that Coe is just emphasizing that the various affixes and enclitics attached to word roots and stems are not usually included in a logogram. If so, I would agree, but Crystal’s definition still needs to be addressed. Also, it is clearly not the case, as Coe states, that logograms only “rarely” stand for a complete word.

2.1.8 Logograms, Syllabograms, and Phonetic Signs

In his book “The Story of Decipherment,” Pope (1999:216) clearly states that a logogram is “a sign for a complete word,” which to be sure is closer to the original meaning of Greek *logos*. Still, he also specifically denies “phonetic” quality to logograms, choosing instead to directly oppose phonographic and logographic signs. “*Phonetic*, or *phonographic*, signs are those that express the sounds of speech as opposed to *logographic* or *ideographic* signs and *determinatives*” (Pope (1999:217). But then, his definition of a rebus sign turns up a recurring connection with sound rather than just with a lexical item. A “*rebus sign* is a sort of punning *logogram* in which the picture of something easy to draw represents something hard to draw but the name *sounds* the same” (Pope 1999:217). So does this mean that the *sound* of a word, but not the *sounds* of *speech*, can be conveyed by a logogram? Instead, it seems rather that the existence of

so-called “rebus signs” provide evidence that indeed logograms do write the sounds of speech. In other words, they are not necessarily tied to the specific meanings indicated by what they depict or represent. Finally, although Pope (1999:217) shuns the word syllabogram, he does note that a syllabary can be “restricted to the first two types,” V and CV, and when it is, “it is called an *open syllabary*.”

An analysis of the Classic Maya writing system quite clearly indicates that it indeed employs an almost completely open syllabic system according to the terminology just presented. It is also quite clear that almost all of the logograms are of the shape CVC or CVCVC (understood here as including VC and VCVC signs) and most of these have a value that equates on a one-to-one basis with words or word roots.

Lyle Campbell (1984:11) describes what he terms “the phonetic hypothesis as originally framed by Yuri Knorozov” in this way:

roughly stated, [it] is that some glyphs sometimes have the phonetic value of a syllable of consonant-vowel (CV) shape; Mayan roots, which are largely monosyllabic, can be represented by two CV phonetic signs, where the vowel of the last is ‘silent’ (CV-C[V]). (Campbell 1984:11)

According to this view, “phoneticism” has primarily to do with the use of two syllabic glyphs to write a CVC word in the language. A more recent and detailed statement which includes a characterization of both types of signs is offered by Terence Kaufman and John Justeson (2001:4):

Epi-Olmec hieroglyphic writing, like Mayan and Zapotec writing, made use of two basic types of signs: *phonetic signs*, which represent *sounds*, and *logograms*, which represent *lexical* items and other *meaningful units* of the language.

While not wishing to dispute the this characterization within the confines of the historical phoneticism issue, there is indeed another connotation of the word “phonetic” that it does not address. It concerns what is also an important issue to address when characterizing the signs of the Maya writing system and is one that will be important for the discussion that follows in this study. That issue is whether only syllabograms write or record sounds of speech or is it valid to say that logograms also write or record sounds of speech. Further, in what sense might it be valid to classify logograms as “phonetic”?

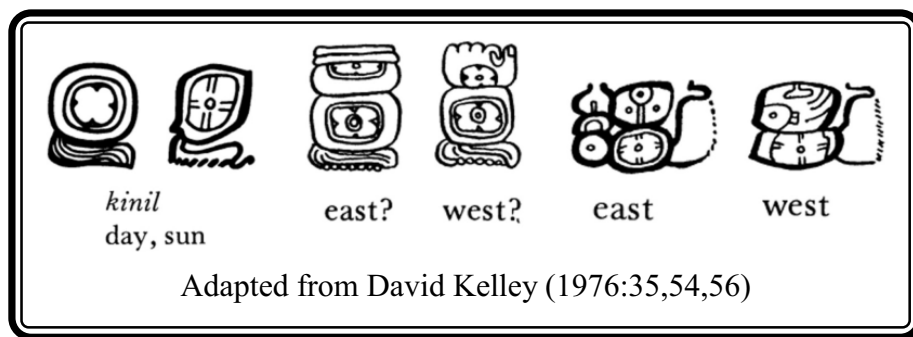


Figure 3. Glyphs writing *k'in* “day”, *lak'in* “east,” and *chik'in* “west” according to David Kelley in 1976

Turning to the comments of David Kelly concerning this issue may help to point out at least one sense in which the term “phonetic” does indeed seem to apply to logograms:

In the past, the term *ideograph* was applied to any glyph which was assumed to convey an idea, whether that idea was nebulous and fuzzy or precise and clear-cut. Ideographic was regarded as the opposite of phonetic, and the *kin* glyph [Figure 3] was used to “prove” that there was “some phoneticism” in the Maya script, since it appeared both with the meaning ‘day’ and as part of the glyphs for ‘east’ (*likin/lakin*) and ‘west’ (*chikin*) [Figure 3] . . . The varied use of the *kin* glyph is, in fact, evidence that an “idea” was conveyed; but it was conveyed through graphemes representing words. . . Such a glyph is, in fact, both *ideographic*, in

the sense of *conveying an idea*, and *phonetic* in the sense that it *corresponds to a particular phonetic sequence*. (Kelley 1976:165)⁵

As Kelley uses the word, logograms are phonetic insofar as they “correspond to a particular phonetic sequence.” A logogram is “a grapheme conveying a word with all its homonyms” (Kelley 1976:296). Kelley (1976:166) also notes that at the time of his writing in 1976, “Phoneticism, in this sense, is no longer in dispute in Mesoamerican studies.”

The difference between logograms (particularly those that are demonstrably rebus-based) and syllabograms is, as Kelley (1976:166) also notes, that “more than one glyph” is used “to write a single morpheme, or word.” But they do not differ from logograms in that their “meaning is determined solely by the sequence of sounds.” For



Figure 4. Example of “rebus writing”

both logograms and “syllabograms,” it is not “the *meaning* that is determined . . . by the sequence of sounds.” It is the equivalent sound or sequence of sounds that is determined by the glyphs whether they are CV syllables or CVC logograms or any other combination. This becomes especially clear with rebus logograms such as in Figure 4, since what is depicted is often **not** directly involved with the desired meaning but rather with the sound of the word. **The logogram determines the sound or phonetic equivalent**, and the meaning is attached to the resulting words and sequences of words basically just as it is in a spoken language. In this case, the glyph in Figure 4 depicts a type of gopher *b’aah* but besides “gopher” it can also be used to write *b’aah* “body, self, head, first.” In other words, from a practical standpoint, the “meaning” that seems to inhere in such logograms is not the meaning intended as part of the message conveyed by the author.

⁵Note that David Stuart (cf. Schele in Schele and Grube 1995:39) has since deciphered the sign for east as *elk’in* instead.

To drive home the point even further, it is even too simple an approach toward so-called “syllabic” glyphs to say that they universally represent or write only CV syllables and not words or morphemes. A few can and are used often both as words and as syllables. One of the most common examples is the sign deciphered as **ti**, which is used both as a simple CV syllable in combination with other signs to write words and also as the preposition *ti* (cf. Figure 5) which is written by the **ti** sign alone.⁶ So for a few signs such as this, it is only the context that determines what glyphic role it plays in any particular occurrence.

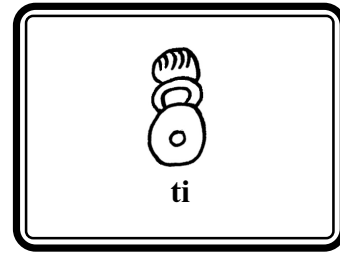


Figure 5. Syllabic sign that can also write a word

2.2 Overview of Maya Hieroglyphic Sign System

2.2.1 Need for Revision of Conceptual Framework

Building upon the previous discussion of the different views of the Maya hieroglyphic writing system and keeping in mind the terms used to describe various types of systems, I will now present an overview of the system from a reader’s point of view. The intent is not to provide documented evidence that any literate Maya scribe actually thought about the system as I will present it. Instead, I will attempt to provide a theoretical explanation of the system’s components and how they function in a way that accounts for their readability in a plausible way. As will be explained in detail in what follows, if one strictly applied the characterizations discussed above to all signs, reading might have been a rather difficult process. Instead, examining how the system works from a practical and strategic standpoint may help to illustrate that it does indeed have as

⁶However, it is important to note that in the language of the Classic Period texts just as in its modern descendants, the prepositions *ti* and *ta* do not take the usual CVC shape but are rather simply CV lexemes. They do not end in glottal stops. The word *ti*’ in the Ch’olan languages means “mouth, lip, edge” and is not a preposition meaning “in, on, at, with.” This does not appear to be the case in some of the other Mayan languages such as Yukatek (cf. Bricker et al. 1998). It should also be noted that it is possible to argue that these prepositions function more as proclitics than words in the Classic texts but that issue is not being addressed here.

its foundation a systematic structure that permitted it to function smoothly for almost 1500 years.⁷

Comparing different non-alphabetic writing systems in order to glean general principles concerning how they function is undoubtedly useful for various purposes. Such principles are especially productive for introductions to writing systems in general. They can also be useful when preparing initial approaches to an undeciphered script or for making progress in gaining a better understanding of one for which decipherment is only in its beginning stages. Although recognizing the many similarities among such systems can produce initial breakthroughs, there are, however, often very many dissimilarities that come to light as progress is made. Sometimes strictly maintaining approaches that obtain at an abstract or general comparative level can actually lead to misinterpretations and retard progress when slavishly applied to a particular system at a more practical level. Also, assuming that the same sign characteristics and basic structures that provided insights into the functioning of some systems may actually lead to misconceptions when applied to another. For example, although certain systems make extensive use of semantic determinatives, others may employ them only in a limited way or not at all. The history of decipherment of ancient languages documents a number of examples, including the Classic Maya system, for which the expectation of specific structures or approaches blocked decipherment at some points until researchers were able to reconceptualize the system in ways that allowed for further progress.

2.2.2 Definition of Terms

In keeping with the original Greek source of the word “ideogram,” its use will be limited in this study to a sign that writes an idea but not a particular word. It is accepted by most students of Maya epigraphy that there are no glyphs that can be clearly identified

⁷A Maya writing system existed prior to the early Classic Period, that is, prior to almost 2000 years ago. However, there seem to be enough differences between the Pre-Classic and the Classic-Period system to justify limiting the comments made here to the latter time period.

as ideograms, that is, as ideas or concepts, but not words. Whether or not any other writing system really employs ideograms will not be addressed here. Also in keeping with its origin, “logogram” will be used to refer to a sign that writes a word or a word root. “Word” when applied to the value of a glyphic sign will not refer to a concept or an idea separate from an actual target word in the language. There is no doubt that words can and do refer to concepts or ideas but that is quite different from a particular sign directly representing an idea without the medium of a word, as, for example, an arrow on a road sign or a telephone icon. While “word” is capable of various definitions, that given by the *Merriam Webster’s Collegiate Dictionary, Tenth Edition* (Mish and Morse 1994:1362) is closest to how it will be used in this study in the context of logograms:

2 a (1) : *a speech sound or series of speech sounds* that symbolizes and communicates a meaning without being divisible into smaller units capable of independent useb (1) : *a written or printed character or combination of characters representing a spoken word*”⁸

The emphasis at this point in the discussion is on the character of a logogram as representing a *sound or series of sounds* rather than an idea. My intention is to demonstrate that this meaning of the term “logogram” best characterizes the overall usage of such signs in the Maya script. This usage also relates to decades-long discussions as to whether or not the signs of the script, including logograms, are “phonetic.” It has already

⁸I would, however, add a proviso to 2a in this definition. Elements that cannot exist alone, such as enclitics and morphological affixes, which appear only as attached to a word, are also generally excluded from being an integral part of a logogram. That is, in fact, why the term “lexeme” is being avoided here when referring to logograms. In a sense, “word root” might more accurate, but some might interpret that term as ruling out cases in which a word and a suffix are reinterpreted to represent an integral and indivisible word such as *pakal* for “shield.” Using the term “morpheme” would open the door to representing, as logograms, many items such as the suffixes and enclitics just mentioned. Such items can be and are written by individual logograms in a few instances although the justification for this limited usage has more to do with the homophonic characteristics of particular words and suffixes than with the nature of logograms in general. All of these considerations will come up for discussion again later in the context of concrete examples.

been noted that this term is also capable of different interpretations in the context of the Maya writing system. “Phonetic” is based upon the Greek *phoneticus* from *phonein* “to sound with the voice, from *phone* “voice.” In general usage, “phonetic” means “of or relating to *spoken language* or *speech sounds*” as defined in *Merriam Webster’s Collegiate Dictionary, Tenth Edition* (Mish and Morse 1994:873). This theoretical question was indeed part of the historical discussion. It was hotly contested as to whether the Maya glyphs represented certain ideas rather than words and if words, did they represent specific words or just concepts capable of being explained by various different words. If they represented specific words, then they must correspond to a very specific *sound or series of sounds*.

Also raised in the previous discussion was the issue of whether a logogram represents a specific meaning. Stated differently, do logograms mean what they depict? Is their meaning limited to the specific word that the image or icon conveys? This question will also be addressed in the upcoming analysis.

The word “phonetic” is also used in a more technical sense as “representing speech sounds by means of symbols that have one value only” (Mish and Morse 1994:873). Consider also this definition of a “phonetic spelling” as one from “a spelling system that represents speech sounds in a one-to-one way” (Crystal 1987:427). Some attribute this capability solely to alphabetic systems (Gelb 1981:1036-1039; 1963:59; Havelock 1982:72). The contention being made here is that syllabic systems and even logosyllabic systems, those consisting of both logographic and syllabic signs, can also accomplish this very well despite those objections. In other words, they can allow or facilitate the reader to reproduce orally or mentally the actual sounds and words of the language as represented by the written signs. Although it is not necessary for a reader to physically reproduce these sounds in order to understand a written text, it is important to note that these types of writing systems can be equipped for use in this way. The Maya Classic-Period writing system is one that is especially capable of providing that capability.

2.2.3 Phoneticism and Writing Systems

That alphabetic systems are theoretically simpler than syllabic or logosyllabic systems in the sense of requiring a smaller set of basic signs is not at issue. Systems consisting of only CV syllabic signs would in turn be more complex at the lowest level than alphabetic systems because they require more basic signs. Strict syllabic systems such as that developed for Cherokee (cf. Foreman 1938) are quite rare. They in turn are simpler than theoretical logosyllabic systems which use both logograms and mainly CV syllabic signs, in other words, those with so-called “open syllabaries.” This is because using logograms could drastically increase the number of different signs used to write a language depending upon the frequency of their use. Technologically speaking, an alphabetical system would also be easier to adapt to mechanical reproduction. A CV-syllabic system would be somewhat more demanding, but with approximately more or less than one-hundred different signs it could surely be quite easily accomplished.⁹ A logosyllabic or logographic system would be the hardest of the three but still not impossible.¹⁰

2.2.4 Phoneticism and Alphabetic Writing Systems

Do the alphabetic systems in use represent speech sounds in a one-to-one way? Do they perform this function more accurately than either syllabic or logosyllabic systems. The International Phonetic Alphabet was formulated in 1889 to provide a way to accurately represent speech in minute detail. While it is very useful for use by linguists to indicate precise phonetic representation, it has proved to be impractical for any normal or regular use to simply impart a message. The International Phonetic Association ceased

⁹For example, there are keyboard adaptations for Maya hieroglyphic writing available that even incorporate some of the more common logograms and syllables as well as some of the more common combinations that write day and month names.

¹⁰For example the Bicameral Pictographic Keyboard discussed at <http://www.pages.drexel.edu/~grafinkm/Pictolinfo.html> and the Geostroke adaptation of a 10-key pad at http://geostroke_abc.tripod.com/ However, most of these input systems are still in the planning and development stages (cf. <http://www.almaden.ibm.com/u/zhai/papers/EASEChinese/WangZhaiSu2001.pdf>)

using its own international phonetic alphabet in its journal in 1970 in the hope of gaining a wider readership. It is difficult for routine use outside of research purposes even for someone who knows it well. Even more important, it registers small differences in pronunciation that could cause communication difficulties for two people with different regional accents. While spoken accents also cause difficulties, there is often opportunity to ask for clarification in oral exchanges while such follow-up would be cumbersome in written exchanges. In short, such a writing system, although more accurate than any others and great for use in research, is counter-productive for normal use. It records more detail than is necessary or practical.

There are practical alphabetical systems in use today that are relatively accurate in the one-to-one representation of speech sounds. German and Spanish, for example, employ an alphabet using spelling rules that admit relatively few exceptions from the standpoint of phonetic representation. Both Spanish and German adapted a Latin alphabet that lacked some needed letter signs, such as, for example, “j,” “q,” and “v” for Spanish and “j,” “k,” “v,” and “w” for German. Further measures were taken to fill in some of the others that were missing. For example, Spanish adopted more than one letter to write the consonants “ch” [č], “ll” [y], and “rr” [r]. There are examples from German as well such as “sch” [š] and “ch” [χ] or [ç].

English employs some of the same letter-combinations, such as “sh” [š] and “ch” [č], as well as others, such as “th” [T] and [D] and “ng” [ŋ]. Also notable are examples of the opposite phenomenon in English as well as in other languages, that is, there are letters of the alphabet that can be used to write more than one phoneme. A well known one in English is “x” which really is the equivalent of combining two sounds [k] and [s] resulting in “ks.” Finally, the existence of a large variety of different vowels and diphthongs, many of which are not reflected in the letters that spell them, add to the non-phonetic character, that is, to the lack of correspondence between how the words are pronounced versus how they are written.

In fact, the English writing system is well-known for its anomalies. Already when the Latin alphabet was adapted for Anglo-Saxon, “an alphabet of 27 graphemes . . . had to cope with a sound system of nearly 40 phonemes” (Crystal 1987:214). That original situation was exacerbated by the almost complete lack of control exerted over the spelling system, which, over time, resulted in hundreds of anomalies. As a result, it is quite correct to say that such spellings are not phonetic since the letters, in such cases, represent sounds different from the sounds of the actual spoken words. So just as logograms can be phonetic insofar they represent the sounds of a word, letters can become non-phonetic in specific contexts if they do not normally represent those sounds.

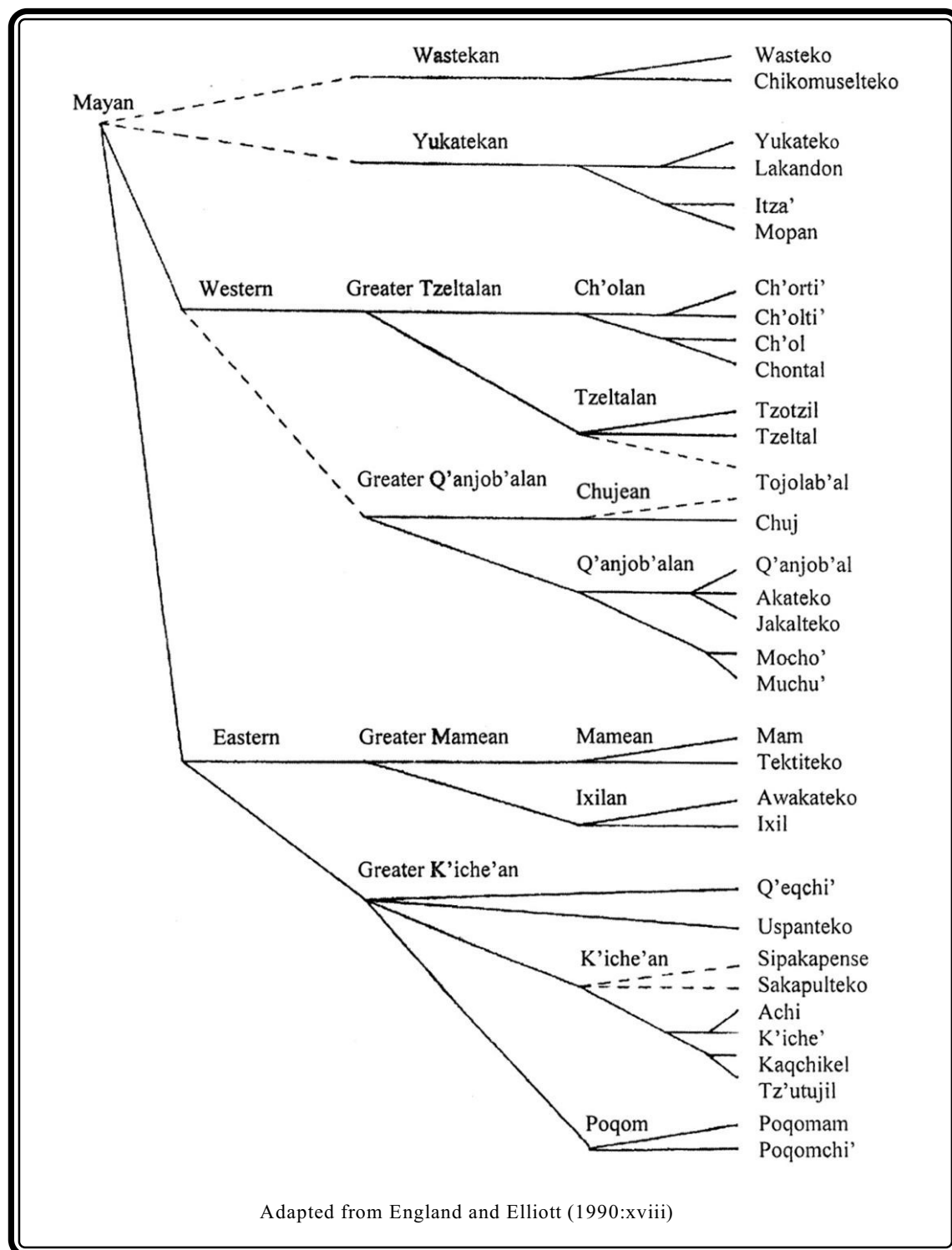


Figure 6. Members of the Mayan language family

2.2.5 Mayan Languages and Alphabet to Write Them

2.2.5.1 Mayan Family Tree

According to the count provided by Nora England and Stephen Elliott (1990), the members of the Mayan family of languages number thirty. A list of them and a breakdown into various family groups is shown in Figure 6. Most, but not all of them are still spoken today. This study is concerned mainly with the Ch'olan and Tzeltalan families because they represent the branches most closely connected with that of the Classic-Period Maya inscriptions. It should also be noted that the chart does **not accurately indicate the relative time-depth** of the various language splits, but provides only a general idea of the historical familial relationships.

Abridged Alphabet of the Academy of Mayan Languages of Guatemala (ALMG)											
ALMG	Phon	ALMG	Phon	ALMG	Phon	ALMG	Phon	ALMG	Phon	ALMG	Phon
'	= /ʔ/	ky'	= /kʲʔ/	s	= /s/	w	= /w/	ä	= /ɜ/		
b'	= /b/	l	= /l/	sh	= /ʃ/	x	= /ɕ/	ä	= /ə/		
ch	= /č/	m	= /m/	t	= /t/	x/xh	= /ɕ/	ï	= /i/		
ch'	= /čʲ/	n	= /n/	t'	= /tʲ/	y	= /y/	ö	= /ɔ/		
d'	= /dʲ/	nh	= /ɲ/	tch	= /tʃ/	a	= /a/	ü	= /ʊ/		
h	= /h/	p	= /p/	tch'	= /tʃʲ/	e	= /e/	aa	= /a/		
j	= /x/	p'	= /pʲ/	tx	= /tɕ/	i	= /i/	ee	= /e/		
k	= /k/	q	= /q/	tx'	= /tɕʲ/	o	= /o/	ii	= /i/		
k'	= /kʲ/	q'	= /qʲ/	tz	= /tɬ/	u	= /u/	oo	= /o/		
ky	= /kʲ/	r	= /r/	tz'	= /tɬʲ/	ä	= /ɨ/	uu	= /u/		

(Compiled using data from Lopez Raqued 1990:95-98)

Figure 7. Partial ALMG alphabet including phonetic equivalents

2.2.5.2 Modern Alphabet for Mayan Languages

A writing system for Mayan languages derived from the Latin alphabet was implemented in Guatemala by the Academy of Mayan Languages of Guatemala (Academia de las Lenguas Mayas de Guatemala: ALMG). It is based upon several alphabets that were already in use at the time. It was then approved by the Guatemalan national assembly in 1994. The letters of that alphabet are shown in Figure 7 along with their phonetic equivalents. According to Margarita Lopez Raquéc (1990:90) the following is a partial list of the main practical criteria used in deciding which alphabet to adopt (my translation):

- That the alphabet should facilitate the process of teaching and learning the Mayan languages.
- That the alphabet should be the most phonemic possible to avoid ambiguity.
- That to the extent possible, the alphabet should unify the dialects within each language.
- That the alphabet should have the flexibility to be functional for each of the Maya languages
- That the alphabet should be practical (referring to both the mechanical and manual reproduction of the symbols that would be used.
- That the alphabet should avoid as much as possible the use of diacritical marks.

The spelling of words using this alphabet is considerably more phonetic than, for example, the alphabet used for English. It also distinguishes explicitly between many more different sounds than does English, German, Spanish, and many other languages. Still, the main emphasis was upon allowing as many phonemic differences as possible to be represented while still maintaining its practicality. As a result, there are several

sounds that are written with two Latin letters although they express only one consonantal or vocalic sound (for example, all long vowels and *nh* (for *ŋ*), *sh* (for *ʃ*) although *x* or *xh* is assigned to the sound /ʃ/. However, this alphabet will be used here in this dissertation for writing all the Maya equivalents of the Classic Period script, because of its comprehensiveness, its practicality, and its broad adoption among Maya speakers, scholars, and academicians as well as among non-Maya academicians and scholars, including epigraphers.¹¹

This very cursory examination of a few alphabetic writing systems illustrates that they can range from very phonetic, that is, approaching a one-for-one representation of sounds (for example the recent ALMG Maya alphabetic script) to less phonetic, that is, using different letters for the same sounds and using the same specific letters for different sounds (for example, the English script). The point is that the one-to-one phonetic character of a script is not based upon the type of symbols used, but upon how the symbols are applied in practice.

2.2.5.3 Correspondence with Sources Using Different Orthographies

As already noted, the ALMG orthography will be used for the transliterations and transcriptions of the Classic-Period inscriptions appearing in this work. However, many of the important sources including dictionaries, grammars, and texts that will be accessed and evaluated have used different orthographies. For the most part, that original orthography will be preserved. In some cases, the sources themselves are open to different interpretations. Transcribing them into the ALMG alphabet might prejudice various issues that are relevant to the matter under discussion. In other cases, converting the orthography might provide an inaccurate transcription of particular phonemes because

¹¹A valid point has been made by some (cf. Nicholas Hopkins 1993) that Yukatek speakers were not as actively involved in the formation of the ALMG alphabet. The same might be said of Chontal, Ch'ol, Tzeltal, Tzotzil, Lakandon, and several other Maya languages. However, among the Yukatekan family, both Mopan and Itzaj were actively involved as was Ch'orti' from the Ch'olan and so, less directly, the Greater Tzeltalan family. The only obvious lack would seem to be the tonal markings of Yukatek, but it seems their addition would be quite straightforward if they consisted of diacritical marks.

of possible sound changes. For these and other reasons, the orthography of the sources will be preserved in most cases. In many cases, the most important words being quoted will be accompanied by a transcription into the ALMG alphabet. These transcriptions will be either given in parentheses or accompanied by a note explaining the specific form. The differences in orthography most often involve a small group of specific letters of the alphabet. In order to make it easier for the reader to compare morphemes from various sources, a list of the most common variants is provided here in Figure 8.

ALMG Alphabet		Variant Orthography
'	=	ʔ, 7
b'	=	b, v
ch	=	č
ch'	=	č'
i	=	y
j	=	h, x, gh
k	=	c (before a, o, u); qu (before e, i), q
k'	=	k, c' (before a, o, u), q'u (before e, i)
s	=	c (before e, i); ç; z
t'	=	th
tz	=	ts
tz'	=	dz, ts'
w	=	u, v
x	=	š; sh
y	=	i

Figure 8. Some orthographic variants appearing in sources

Besides orthographic variation, the transcription used in some sources reflects an actual sound change in the language itself. For example, several of the languages most important for the analysis being carried out here do not attest two separate fricatives or spirants corresponding to a glottal /h/ and velar /j/. These include all of the Colonial and

Modern Ch'olan languages. In those cases, the spirant would normally be written using the *j* of the ALMG alphabet. However, the various Ch'olan sources use either *h* or *j* to write that same single fricative. Among the Tzeltalan language sources that will be referenced here, Colonial Tzotzil and Tzeltal and the modern Bachajón dialect of Tzeltal preserve forms of both the glottal /h/ and the velar /j/. In the Colonial-Period sources, the velar /j/ is often written as *gh* while the glottal /h/ is written as *h*.

Ch'orti' has for the most part substituted /r/ for /l/. Chontal has done so only to a very limited degree. What is important to remember is that any *r* in the sources is equivalent to *l* in other languages in which that sound shift has not occurred. This variation has not been documented in the Classic-Period texts. Ch'orti' has also changed /w/ to /g/ in some circumstances. The *g* written in such cases is simply the equivalent of *w* in the other languages. To a limited degree, Ch'orti' also attests an /o/ vowel where the other Ch'olan languages have /a/ instead. Although not likely due to any direct contact between the two languages, Tzotzil also attests variation between /o/ and /a/. This variation is much more pervasive in Tzotzil than in Ch'orti'. In many cases, the same roots and lexemes are recorded with both *a* and *o* in the same sources.

As can be seen in Figure 8, some of the variants are due to the adoption of a Spanish version of the Latin alphabet for recording the various Mayan languages. For example, since Spanish does not have a *w*, most early Spanish language sources write *u* instead. However, there is a sound change in Modern Zinacantán Tzotzil that should be noted in this regard. The phoneme /w/ has changed to /v/ and is recorded as *v* in the sources. Other Spanish orthographical influences such as *c* or *qu* for *k* can be found in the Figure 8 list.

Abbreviations Used for Morpheme Analysis			
ADJ:	adjective	N:	noun
ADV:	adverb	OPT:	optative
AP:	antipassive	PRT:	participle
ART:	article	PAS:	passive voice
ASP:	aspect marker	POS:	positional verb
COM:	completive aspect	PSN:	possessed nominal suffix
CNJ:	conjunction	PRC:	proclitic
CV:	consonant-vowel	PRP:	preposition
CVC:	consonant-vowel-consonant	PTC:	particle
DEM:	demonstrative pronoun	RTV:	root transitive verb
DTV:	derived transitive verb;	TERM:	terminal marker
ENC:	enclitic	THM:	thematic suffix
EP:	epenthetic	TRS:	transitive resultative
GER:	gerund	TV:	transitive verb
INCH:	inchoative	VC:	vowel-consonant
IND.PRN:	independent pronoun	3SA: (1/2/3)	3 rd singular absolutive (Set B) person marker
INP:	innate possession suffix	3SE: (1/2/3)	3 rd singular ergative (Set A) person marker
IRS:	transitive resultative	[] brackets	enclose reconstructed letters or morphemes not explicit in original source
IV:	intransitive verb	() parentheses	enclose letters or morphemes not specifically required or not written
MPS:	mediopassive	Does not include abbreviations from sources	

Figure 9. List of abbreviations used for morpheme analysis in figures

2.2.5.4 Abbreviations Used in Figures for Morpheme Analysis

In the text of this study, I have avoided as much as possible the use of abbreviations to identify and classify morphemes. However, space concerns make abbreviation in figures unavoidable. Figure 9 contains a list of those used. It should be noted that this list includes only those used in analysis by this author. Any other abbreviations used in quoted analysis in figures and elsewhere are those of the original source and their meanings must be sought in those original works.

2.2.6 Comparison of Syllabic and Logographic signs

Since the Classic Maya script does not use alphabetic symbols as such, but rather, for the most part, a combination of CV and CVC signs, they will be our main focus for the rest of this section. Some arguments have already been made for the view that signs of the shape CV, often called “syllabic signs” or “syllables” and less often “syllabograms,” and those of the shape CVC, often called “logograms” or “logographic” signs can be and, in the Maya case, are both “phonetic” in the sense of accurately representing sounds. Although some scholars have questioned and may still question the characterization of logographic signs as “phonetic,” few if any would object to applying that attribute to “syllabic signs.”

Perhaps the most accurate way of stating the character of syllabic glyphs is that they represent sounds with the structure CV. These syllables are, for the most part, not coincident with words, although there are a few words, such as the prepositions *ti* and *ta*, that in Ch’olan are not pronounced with a final glottal stop. Because of this, these very rare cases form a small set of morphemes generally recognized as words that are written using what are otherwise rightly classified as syllabic signs. This is not affect or diminish the value of classifying this group as syllables. The exceptions are due to the vagaries of any natural language which, despite the attempts of prescriptive grammarians, occasionally stray from strict rules which, while useful, cannot always successfully determine or prevent changes in usage within a language group.

2.2.6.1 CV Glottal-Stop Syllables Versus “Pure” Vowels

2.2.6.1.1 Examples of Phonemic Use of Glottal Stops

Another issue concerns syllabograms that some epigraphers interpret as “pure” vowels. In all Mayan Languages, the glottal stop plays an important role as a consonant. There are many examples in the Ch’olan languages where its presence or absence is significant in the formation of minimal pairs. For example, the word *che* in Ch’orti’

means “say, tell, speak to, speak a language” but *che*’ means “do, make, cause, perform, treat, handle, behave.” Historically, *che* was *cheh* with a glottal /h/, but the difference between the glottal and laryngeal /h/ no longer exists in modern Ch’orti’ and *che* “say, tell, speak” is pronounced without the /h/ and without the glottal (pers com. Lucas Lopez 1999).

Two other very common examples of words in which the presence or absence of a glottal-stop consonant determines the meaning of different words involves the prepositions *ti* and *ta* just mentioned above. In Modern Ch’orti’ (Wisdom 1950:670, 672) and Classic Ch’olan in areas where it is used, the preposition *ti* “in, on, with, at, etc. is distinguished from *ti*’ “mouth, lip, edge” (Wisdom 1950:672) only by the presence or absence of the glottal stop /’/ consonant. The same is true for Ch’ol as attested by Hopkins and Josserand (1988f:t6). The evidence shows, then, that in these languages, the glottal stop consonant is clearly phonemic.¹²

Similarly, in Chontal and in some of the dialects within Classic Ch’olan and Ch’orti’, *ta* is used as a general preposition with the meaning “in, on, with, at, etc.” It is defined as “locative and instrumental particle” in Ch’orti’ (Wisdom 1950: 645). In Ch’orti’, *ta* is distinguished from *ta*’, a “plant or animal excretion (as excrement, sap, juice, gum); anything left, shed, or cast off (as an egg, fruit, shell, skin, placenta); residue (as scum, a footprint, viscera)” (Wisdom 1950:665). This same distinction is made in Chontal (Keller and Luciano G. 1997:221,227). In each case, the only difference between the two words is the presence or absence of a final glottal stop. In keeping with this data, these minimal pairs are also reconstructed for Proto-Ch’olan by Kaufman and Norman (1984:131,139).

¹²The only extant documentation of Ch’olti’ (Morán 1935d) is not useful in this regard since it generally fails to record glottal stops. That *ti*’ is a preposition that is analyzed by some as having a final glottal stop in some Yucatekan languages (cf. Hofling and Tesucún 1997:593 for Itzaj and Barrera Vasquez et al. 1980:788 for Colonial Yucatek) is not immediately relevant here because this is clearly not the case in the languages most closely related to the bulk of the texts which comprise the object of this analysis.

2.2.6.1.2 Word Initial Use of Glottal Stops

Although a glottal stop is a significant consonant in all Maya languages, not all Maya languages have glottal stops at the beginnings of all words. For example, Kaufman (2003:27) notes that “All G[reater] K[’iche’an] languages except Q[’eqchi’] lack initial glottal stop.” But even for those languages, the glottal stop is present:

when an unpossessed noun is not initial in a compound, as 7aj= 7iitz, yaj= 7anaab'. All other [Mayan] languages, including QEQ [Q’eqchi’], have initial glottal stop that does not elide, except after ERGative prefixes. (Kaufman 2003:27-28)¹³

Many Mayanist linguists have recorded the phonetic presence of glottal stops in various positions, including at the beginning of words when no other consonant is present. However, since there arguably are no minimal pairs contrasting words beginning with glottal stops from those beginning with vowels, some prefer to transcribe such words without specific marking for the word-initial stop. This is also what has been decided by the Academy of Mayan Languages of Guatemala, whose alphabet is used in this study. But this is a decision based upon practicality and simplicity, not one based upon pan-Mayan comparative studies. As Kaufman (2003:24) also notes, that is an orthographic issue and not a contrastive issue: “While not contrastive for Greater K’iche’an languages, it is contrastive for all other Mayan languages, including Q’eqchi’, and should be written.” In other words, if the glottal stop is not written at the beginning of words, these differences between languages will not be apparent

It should be noted here that these and other issues concerning the initial glottal stop that will be brought up shortly may or may not have a bearing upon whether or not

¹³Note that Kaufman and others sometimes write the glottal stop using the number 7. Some use a question mark (?), often without the bottom dot (?), to accomplish the same thing. The ALMG alphabet uses the apostrophe or single quote to write both glottal stops and glottalized consonants. That is also the practice that is being used in here this present study.

the Maya scribes viewed 'VC words as CVC words or 'V syllables as CV syllables rather than as VC words and V syllables.¹⁴ So in this discussion, we are dealing with at least three different issues and our answer will in part depend upon the purpose and context of the transliteration or transcription. One is orthographic, and the decision how to transliterate and transcribe words may depend upon various issues such as ease of use, application of a general standard recognizable broadly by readers, and whether there will be misunderstandings created by the choice of transcription. If one is transcribing for dictionary entries encompassing multiple Mayan languages, then Kaufman's reference to representing contrastive phonetic evidence becomes paramount if misunderstandings and misinterpretations are to be avoided. If one is mainly concerned about representation within a particular language or within a non-contrastive group of languages, then other factors such as standard orthography become more important. Interesting for us here is a third issue, that is, whether or not the Maya scribes may have viewed certain syllabic glyphs as representing a CV syllable and others as representing only "pure" vowel syllables rather than as CV syllables beginning with a glottal stop sound (/ʔ/). Of course, to a certain degree, issues or evidence that influence one's decision in this regard, may also influence one's decision in the others as well.

2.2.6.1.3 Comparison of hV Syllabograms with 'V Syllabograms

There are several reasons to support an argument that they did consider such glyphs to be CV syllables rather than simply V syllables. There are many similarities in the way both an initial glottal *h* and an initial glottal stop ' are treated in many of the Mayan languages. There is evidence of this similar treatment in the language of the script as well. Words that begin with a glottal stop and those that begin with a glottal *h* both employ the so-called "prevocalic" version of the ergative pronouns. This means that the speakers do not distinguish in this context between the way they treat glottal stops and

¹⁴Note that, based upon the arguments below concerning the similar treatment of glottal stops (ʔ) and glottal *h*'s, this question must also be answered for *hVC* words and *hV* syllables as well.

glottal /h/'s.¹⁵ In analyzing this, the grammarian who is attempting to formulate rules that best match actual performance must decide whether there are one or two different motivations for this. One of the most simple rules one could formulate might be: “If the word begins with a soft or glottal consonant, the variant form of the ergative pronoun is to be used.” However, in actual statements whether oral or written from epigraphers and even more traditional linguists, the rule usually cited is “prevocalic” versus “preconsonantal.” However, this ignores completely the attested practice for words beginning with a glottal /h/.

It is one thing to decide against Ockham’s razor and state a more complex rule instead of a simpler one that covers all cases. It is quite another to use a rule that does not jibe with actual usage. From a practical standpoint, a rule limited to prevocalic contexts, if that meant that nouns and verbs beginning with /h/ were excluded from the rule, would be incorrect. From a logical standpoint, if one denied consonantal status to initial glottal stops for this reason, one would also have to deny consonantal status to glottal /h/'s. From a grammatical standpoint, it make more sense, to formulate one rule to cover all the relevant cases. So analytically, treating both glottal stops and glottal h's as soft glottal consonants makes the most sense. A related but separate question is how ancient Maya speakers and scribes might have analyzed it. This can only be decided based upon the evidence present in the texts themselves. However, to the extent that it is valid to suppose a tendency towards a more simple rather than more complex set of rules, the point of departure surely has to favor the analyst’s Ockham’s razor approach.

¹⁵For this reason, it is not appropriate to use the absence of a glottal stop between the *y*- third-person ergative dependent pronouns and the first vowel of the possessed word root as evidence for its treatment as a VC root rather than a CVC root unless one is also willing to treat *hVC* roots the same as 'VC roots. Since the /h/ is also not present nor represented following ergative pronouns, this warning made by Houston et al. (2001a:48) would have to apply to *hVC* roots as well. “The glottal stop (') is transcribed in front of the *o*, but Robertson feels that initial glottals are not the same as consonants, in contrast to what many other Mayan linguists believe. When possessed by ergative pronouns, words beginning in vowels show no evidence of such glottals, as in glyphic *y-al*, ‘her child.’ . . . When recording vowel initial words, Maya scribes had no choice but to use these syllables, but not necessarily out of any concern for rendering initial glottal stops. ‘Caveat Lector’.” Thus, relying on this argument alone, one would have to deny consonant status to *h* as well.

Because initial glottal /h/'s and glottal stops (/ʔ/) share similar qualities, words containing either behave similarly across different Maya languages. It is true that most K'iche'an languages do not begin words with a glottal stop, but in certain contexts (as described by Kaufman and noted above), the historical glottal stop does appear at the beginning of those same words. In Mam (and Awakateko), Proto-Mayan words that begin in /h/, begin with a glottal stop. Examples are words such as *uul* ('*uul*) "arrive" and *a'* ('*a'*) "water" which begin with a glottal stop instead of an glottal /h/ in Colonial Tzotzil or a /j/ in Yukatek and the Ch'olan languages¹⁶. It seems that what occurred in these languages is a sound change from glottal /h/ to glottal stop (/ʔ/), a switch from one glottal consonant to another. Of course, this alone is not evidence that an /h/ must become a glottal stop in the event of a sound change, but only that such a shift is a documented one. It also is evidence for the similarity of the two consonants.

2.2.6.1.4 Evidence Based upon Scribal Practice

In order to represent a glottal stop at the end of a word in the script, scribes employ a 'V syllable or a V (vowel) syllable depending upon one's interpretation. Here again there have been different ways to formulate a rule that describes what is actually happening. The normal pattern in CVC words written with two CV syllables is for the vowel of the final syllable not to be sounded. If this rule is also valid when words with final glottal stops are written, one would need to use a syllable with a glottal stop as its first consonant. One rule or practice would cover all cases. That description of the strategy would work in all cases only if one endorsed 'V as a CV syllable rather than a V or "pure vowel" syllable.

¹⁶An interesting note in regard to Yukatek is that although the distinction between the glottal /h/ and the velar /j/ was eventually lost, the use of the so-called "prevocalic"ergative pronoun forms continued in Colonial times but only for those words that previously began with glottal /h/'s. One of several examples is "*hulel, huli, huluc but* "*¿biy kin yulel a yum?* ¿quando viene tu padre o ha de venir? ("When did your father arrive or has he arrived?") (Martinez Hernandez 1930:431). Compare this to "*hul . . . Má bahun a hulic manaan uhol*, nunca ensartes lo que no tiene agujero" ("Do not thread that which has no hole.") (Martinez Hernandez 1930:402).

If one disagreed that such a syllable as 'V existed for the Maya scribes, but that they instead thought rather in terms of CV syllables and V syllables, the reasoning would have to be different. They would have had to use a vowel after a CV syllable to write the sound of a glottal stop although neither the vowel of the CV syllable nor the V syllable itself would have contained a glottal stop. They would have viewed the glottal stop as instead the repetition of the same vowel sound. Although possible, it seems unlikely that the scribes would have both viewed the 'V signs as devoid of glottal stops, and so as V syllables instead, and then used those same vowels to elicit a glottal stop. This seems even less likely since it would also have required at least the implicit existence of two types of syllabic signs. The straightforward alternative of viewing them all as one type would have immediately erased the problem of how to elicit a glottal stop when required. In other words, the original strategy of not voicing the final vowel would have been all that was needed.

2.2.6.1.5 Comparison with Colonial-Period Alphabetic Practices

Epigraphers disagreeing with viewing 'V syllabograms as a CV syllables sometimes make reference to Colonial texts using the Spanish alphabet that do indeed provide some instances of two vowels written when a glottal stop is desired. This occurs, for example, in the *Paxbolon-Maldonado Papers* written in Acalan Chontal. There are examples of “water” and “rain” written *haa* and “beans” written *buul*, although the former also occurs as *ha* and the latter as *bul*. However, this is easily and logically explained by the lack of a sign for the glottal stop in the Spanish alphabet. When a glottal stop occurs at the end of a word, it is usually followed by an echo of the vowel that precedes it. Since there is otherwise no consonant to represent the glottal stop, repeating the vowel reproduces at least part of what one would hear in actual speech, for example, the *o'o* of *mo'*.¹⁷ However, this argument also leaves much to be desired. Since the

¹⁷It is also true that the data from Colonial documents is quite varied. Victoria Bricker (2000:101-
(continued...))

vowel *o* in Spanish theoretically does not begin with a glottal stop, how is it adequate to produce a glottal stop plus a vowel. What is more, if the supposed **o** sign in Classic Ch'olan does not begin with a glottal stop, how is it adequate to write a glottal stop in the first place? It can just as well be argued that an **o** only reproduces part of what comprises a glottal stop, that is, only the echo vowel that sometimes occurs after a glottal stop, but not the glottal stop itself.

It is also true that the adaptation of an alphabet that does not contain all the signs necessary to represent the sounds of the Maya language can be seen in a number of other more or less accurate transliterations. The word in the Classic-Period script for *iwal* **YU-WA-LA** “and now, and then,” is usually written *yuual* in Acalan Chontal, possibly doubling the *u* to produce the consonant or semivowel /w/. As already mentioned, arguments have been made for the non-existence of a glottal stop consonant in the Classic-Period writing system based upon occasional use of double vowels to indicate a glottal stop in some Colonial Period texts written with an alphabetic system. If one used the same argument here in the case of *yuual*, one might then conclude that there was no **w** consonant or at least no **wa** syllable in the Classic Period. Of course, such an argument would be invalid. However, the argument in both of these cases is indeed based simply upon the lack of a consonant in the Spanish alphabet to serve as a suitable replacement.

¹⁷(...continued)

102) for example, also takes the view that the practice of repeating a vowel to represent a glottal stop is indirect proof of its presence. She also notes that there are examples of writers using *k*, which is a *k'* in the standard orthography, to write *k'ohel* “we know it.” This cannot be a *k'* since the pronoun is *k* in Classical Yucatek. So that writer is striving to represent an initial glottal stop even though it normally would elide in that position.

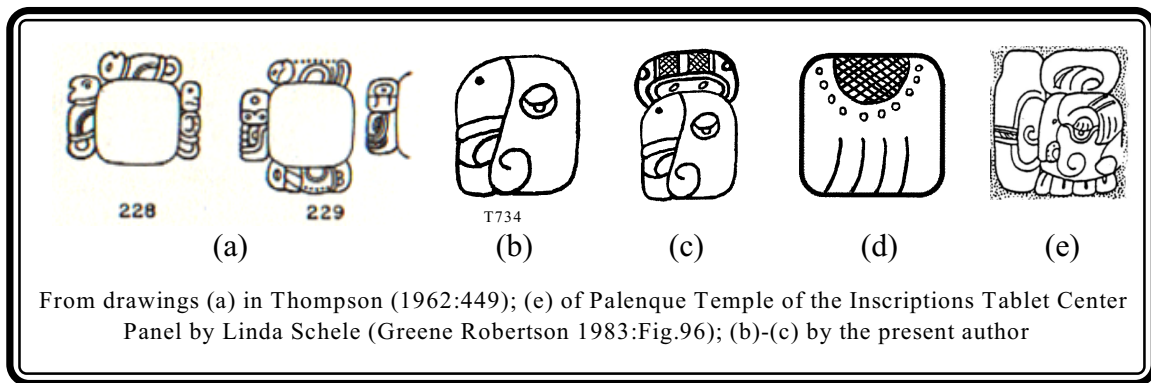


Figure 10. Various signs beginning with glottal consonants or vowels

2.2.6.1.6 Use of 'V Syllables When Glottal Stop Not Needed

There are instances in which certain consonants, especially weak consonants, that are part of CV syllables and even CVC logograms are ignored. The beginning or ending weak consonants such as glottal stops ' and **h** are occasionally meant to be ignored or not sounded. One syllabogram with which this happens quite often is 'a. Pictorially, as T228 or T229, it portrays the beak of a turtle (Figure 10a) or as T743, the head of a turtle (Figure 10b). Kaufman and Norman reconstruct "turtle" as **ahk* for Proto-Ch'olan. These signs are used in various contexts to write morphemes that begin with a vowel or glottal stop, such as the 2nd sg ergative pronoun *a-*. However, these two signs are also sometimes used to write morphemes that normally begin with glottal *h*. They are used, for example, in names of polities that include the word for water *ha'*, such as *Yax Ha'*. In practice, some names such as this are often pronounced without the /h/ in the Colonial and Modern Ch'olan languages, resulting instead in *Yax'a* or even *Yaxa* as shown in Figure 10c. In those cases, a word that, at least etymologically, begins with a glottal /h/ is written instead with an 'a (or a) syllable. It is important to note that these practices vary depending upon time and place. For example, at Palenque, the toponym *Lakam Ha'* is written using the logogram **HA'** instead. This logogram consists of the *Imix* day sign similar to T501 but with crosshatched or darkened oval near the top instead as shown in

Figure 10d. Finally, there are cases in which there is no doubt that the glottal stop is not to be used as part of the lexeme that is being written. One example of this is shown in Figure 10e. It occurs on the Central Tablet of the Temple of the Inscriptions at Palenque. The form of the verb will be discussed in great detail later but it can be transliterated as **yi-li-’a-ji**. Neither the **I** of **li** nor the glottal stop of **’a** is used in the transcription *yilaaj* “He saw/watched over/attended it.”¹⁸

This irregularity and elision of weak consonants is noticeable in the history of most languages. In the Classic-Period inscriptions, these same consonants, and others besides, are often lacking in words such as *b’a(h)* “image, head, first” and *b’i(h)* “road” in many of the texts. There are, however, also many occurrences of these words and others like them in which both the glottal stop and glottal *h* are expressly written, for example, as **b’a-hi** or **B’AH-hi**. It is possible to argue then that such usage attests mainly to the weakness of the consonants and varies depending upon the time and place. For that reason, both the glottal stop (’) and glottal **h** will be treated here as part of the sign system itself. They belong to the overall system and have an effect upon how these signs can function. The weakness of these consonants sometimes leads to variance from the norm. Such divergences should not be interpreted as requiring the formulation of completely new rules which overturn those governing almost all scribal practice. Instead, the practice of suppressing the initial consonantal sound of glottal stop **’V** and glottal **hV** signs should be formulated as exceptions to the normal rules. Redefining **’V** syllables as “pure vowels” without doing the same for *hV* syllables would be inaccurate anyway, since such practices affect **hV** syllabograms as well. What is more, variation of this type in the case of both glottal stops and */h/*’s is frequent in the Colonial and Modern Ch’olan, Tzeltalan, Yucatekan and other Mayan language families as well.

¹⁸More accurately as will be suggested later, the translation of this verb which is inflected for transitive resultative aspect (see Section 4.7.1 below), might be “He was in the state of having seen/watched over/attended it.”

2.2.6.1.7 Clarification of Issues and Explanation of Approach

There are two different decisions to be made here. One has to do with how the individual syllabograms and logograms containing glottal stops are best transliterated, that is, how are they to be converted from a logosyllabic system into an alphabetic one syllable by syllable and logogram by logogram. The second is how the words in the Classic Ch'olan language are to be transcribed, that is, how are the words to be written using the alphabet of the ALMG, the Academy of Mayan Languages of Guatemala..

In the latter case, the transcription into words, the glottal stop does not need to be represented at the beginning of words since there are no cases in which glottal stops and initial vowels form minimal pairs, that is, cases in which the two are contrastive. This decision as well as the decision to use the apostrophe for both glottal stops and glottalized consonants are presumedly based upon ease of use and the desire to avoid creating new signs, both of which are among the goals set forth in the decision to adopt the standard ALMG alphabet. While attempts were made to make the alphabet represent the sounds as accurately as possible, total precision might have lead to one that was not practical for general use especially beyond the field of linguistic studies.

In the former case, the transliteration of syllables and logograms, it should be noted that, despite its absence in the initial position, the glottal stop is represented in both medial and final positions in the standard alphabet. It should also be noted that syllabograms can be used in any position in a word, initial, medial, or final. It seems more likely as well that a system based upon so many CV syllabic signs would encourage viewing the 'V signs as CV syllables as well. If so, it may be less likely that they would decide upon primarily single-sound characters for vowels, as in an alphabet, and then use two of these single-sound vowels to represent a glottal stop. This is especially likely because 'V-syllables formed in the same way as other CV syllables would work well in writing glottal stops both word-medially and word-finally. Finally, if they indeed did separate the vowels conceptually from consonants, why would they not have done the same for consonants, thereby finally arriving at an alphabetic system.

Based upon these considerations, when **transliterating** syllabograms, which can appear in any position in a word or word compound in this study, the glottal stops will be explicitly represented. However, when **transcribing** words, glottal stops will not be represented word initially although they will be used word internally and word finally. Although perhaps an argument could be made for leaving glottal stops out word initially for **transliterations** of logograms, they will be explicitly written for logographic transliterations as well. However, following the ALMG alphabet, glottal stops will not be transcribed at the beginning of words.

2.2.6.2 Some Shared Characteristics of Syllabograms and Logograms

2.2.6.2.1 Classic Ch'olan Syllabary

Syllabograms have a value that almost always consists of a single CV syllable. Figure 11 and Figure 12 comprise a syllabary that includes the most common signs that have CV values. For the purpose of this syllabary, the glottal stop is considered a consonant. Not all the variations of each syllabic sign is included. For the most part this list represents sign values that are accepted by most epigraphers.

	b'	ch	ch'	h	j	k	k'	l	m
a									
e									
i									
o									
u									

Adapted with changes from Schele and Grube 2002:16

Figure 11. Syllabary: Part 1

	n	p	s	t	t'	tz	tz'	w	x	y	(') or null (Ø)
a											
e											
i											
o											
u											

Adapted with changes from Schele and Grube 2002:17

Figure 12. Syllabary: Part 2

2.2.6.2.2 Both Logograms and Syllabograms Can Write Single Syllables

Considering the difference in terminology, it may seem surprising that most Maya logographic and syllabic signs share characteristics that one would assume belonged specifically to syllabograms. However, it is true of both types of signs that their value almost always consists of a single syllable. For example, the value of the two logograms in Figure 13a-b are **WITZ** and **WAY** respectively. They both write single-syllable CVC roots. For that reason it could be confusing to reserve the term “syllabic sign” or “syllabogram” for CV signs in the Maya script because almost all logograms represent single-syllable words or word roots.¹⁹

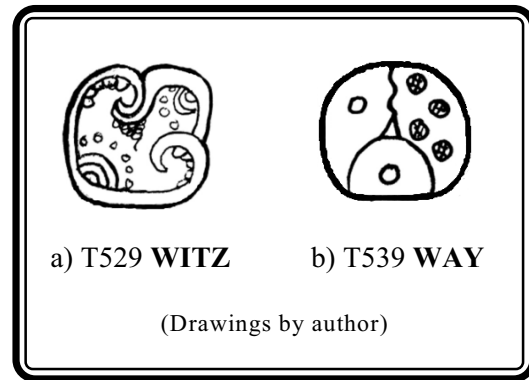


Figure 13. Two logograms that write single-syllabled CVC roots.

One way to justify using the term “syllabic sign” for CV syllabograms is by noting that such a sign on its own, with very few exceptions, does not write a word but rather only a syllable. Also, as mentioned earlier, another way to explain what actually distinguishes syllabograms from logograms is to restrict the terms “syllabic sign” and “syllabogram” to open syllables, that is to syllables with no more than one consonant. Most individual logographic signs also write single syllables but the syllables they write are words or word roots and most of the logographically written syllables are closed, that is, they consist of CVC rather than CV syllables. Finally, despite the obvious inaccuracy of reserving the terms “syllabic sign” and “syllabogram” for just one of these two types of syllables, the terms are so entrenched in their use in referring to open syllables, and possible alternatives are so lacking, that I will continue to use both of these terms to refer

¹⁹“Root” is used here as “the base form of a word, which cannot be further analyzed without loss of a word’s identity; alternatively, that part of the word left when all affixes are removed” (Crystal 1992:336).

to syllabic glyphs whose individual values do not normally write words.²⁰ The proviso for their usage is that the terms “syllabic sign” and “syllabogram” are meant to differentiate CV syllabograms from CVC “logographic signs” and “logograms” although even the latter are actually mostly single syllabled as well. However, this conventional usage is most emphatically not meant to detract from the recognition of the phonetic nature of logographic signs. Both types are phonetic. A CVC logogram writes not only a syllable, but at the same time a word or a word root.

2.2.6.2.3 Both Types of Signs Feature Pictorial Representations

There is another characteristic shared by syllabic and logographic signs. Both types of signs are pictorial or iconographic. That is, they both depict, more or less recognizably and more or less abstractly, non-human persons, animals, plants, things, actions, events, or various combinations of them. In the case of logograms, the result is a series of sounds, usually CVC, that are words or word roots. They most often correspond phonetically (aurally and acoustically) to the item or action depicted but sometimes do not correspond semantically to it. This will become clearer as we examine in detail how logograms function. In the case of syllabic signs, which are almost always of the shape CV, the evidence is very strong that they too pictorially represent more or less abstract non-human beings, animals, plants, things, actions, or events. This evidence will be examined later as well. As a group, insofar as their pictorial templates are discernible, they differ from logograms in that the sound they represent is that of the depicted item minus a consonant, almost always the second one.

²⁰Exceptions to this would be words that are, in effect, open syllables such the prepositions *ti* and *ta* “in, at, on, by, etc.” and other words that are sometimes pronounced and written without their final consonants, such as *b'aa(h)* “image, body, self, and *b'i(h)* “road, path.”

2.2.7 Classic-Maya Sign System: Pictorial Appearance, Phonetic Content

2.2.7.1 Clarification of Terminology: “Pictorial”

In order to avoid misinterpretation or misunderstanding and in light of earlier mention of “pictographic” as a type of writing system, it is important to clarify what it meant here by pictorial. Calling a glyph “pictorial” does not imply that its meaning resides in what is depicted independent of the lexical value of a particular logogram or the syllabic value of a particular syllabogram. In other words, the result is still meant to be the equivalent of a particular sound or combination of sounds comprising a word or word root.²¹ A pictographic representation, on the one hand, is similar to a picture or series of pictures without words. It is similar to a picture book or a possibly a “comic book” without captions. It is a wordless message. A pictorial logogram or syllabogram, on the other hand, represents a particular sound and the “picture” is there to call forth a particular word or syllable based upon a word and not to provide extra-lexical meaning.²²

An examination of specific types of logograms will provide evidence that although a place name may be written pictorially, it is still not a pictogram but rather a logogram, a series of logograms, or a combination of syllabograms and logograms. Although it is true that one might look at certain logograms and sometimes be able to guess more or less accurately what its translation into a second

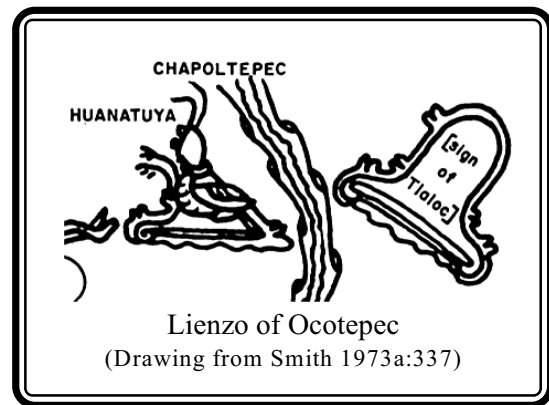


Figure 14. Signs for “Grasshopper Hill and “Rain Hill”

²¹We shall see later that this is true even in the case of rare logographic combinations that are meant to write a particular word rather than pictorially or iconographically represent it (see Section 2.2.8.7.5 below).

²²This does not mean that the scribe cannot find ways to provide extra-lexical meaning when employing the writing system. Examples of that type of non-verbal meaning are discussed in Section 2.2.9. Rather than providing an argument against logograms pointing toward a particular word and syllabograms pointing toward particular syllables, such wordless messages help to illustrate the difference between linguistic and extra- or peri-linguistic communication in the script.

language might be, that does not prove it is a pictograph. Monaghan (1994:87-88) in reference to the Mixtec place name *Yucu Savi* (see Figure 14), says that he could recognize it as “a hill with the sign of the rain god on it,” could translate it into Spanish as “cerro de la lluvia,” and then have an area resident recognize this and say “Yes, it’s called *Yucu Savi*.” This he takes as evidence that it is pictographic or “ideographic,” in his words, and is thereby placed into a “residual category into which is placed all signs that do not have anything to do with words.” Finally he concludes that “pictographic” “really says nothing about the signs that are in that category themselves, except that *they are not based on language*.” Although the chain of events Monaghan describes concerning people who speak different languages is theoretically not impossible, it provides a very misleading analysis as to how such a writing system works. Such a description is even less applicable to how the Classic Maya writing system works.

It is especially ironic that a place name or town name should be taken as an example of pictographic writing. Such names are almost always thought of in everyday use as particular entities and the literal meaning of the actual words making up the name are seldom what one has in mind in saying or writing them. Try, for example, going to Germany and asking a native German who also speaks English how to get to “little monk” and see how long it would take you to explain you are referring to München. For that matter, even calling it by its French name “Munich” will get blank stares from many. Or try telling a New Mexican that you are looking for “holy faith” and see in which direction he points you when you actually need directions to Santa Fe. This is possibly a universal characteristic of proper nouns or names, that is, except in special circumstances, names are used to refer to a particular person, animal, place, or thing. Their meanings outside of those referential contexts only become relevant when they are not used referentially.

All one can say about such signs without further knowledge is that they are pictorial. Whether they are pictures devoid of linguistic content, or whether they are logograms or syllabograms, which in many cases is actually likely, would remain

unanswered at that stage. Pictorial glyphs resemble things and actions one experiences or sees. They are not necessarily meant to refer to or to be interpreted as what they resemble. In the case of Classic Maya logograms and syllabograms, the evidence shows that they are most often to be interpreted as writing sounds related in some way to the items or actions they depict. Interpreting them as always representing the things they depict or as ideas not based upon words and sounds was one of the main reasons why such little progress was made in reading Maya hieroglyphs for almost one-hundred years after locating the Diego de Landa manuscript.

2.2.7.2 Methods of Decipherment

I have suggested so far that the best way to distinguish between logograms and syllabic signs is by whether they are used to write words or word roots, almost all CVC syllables, or whether they write CV syllables that are, with a few exceptions, used only in combination with other CV syllables or logograms to write words. Evidence for the specific values of glyphic CVC logograms or CV syllables has come primarily from their use in context. In fact, although pictorial representation may have sometimes given clues, it is primarily through contextual evidence such as phonetic substitution, phonetic complements, and use in different contexts that secure decipherments have been made. That evidence will not be reviewed here. Many epigraphers have contributed to this endeavor and the value of certain glyphs have often been discussed over periods of years before mutually acceptable evidence has been broadly accepted. Some of the syllabograms match precisely the signs recorded for Diego de Landa probably by Gaspar Antonio Chi. At other times, especially for pictorial logograms, decipherments have been suggested and accepted, but the non-pictorial evidence for their value had not been fully vetted until later.

Sometimes decipherments, especially those based for the most part on the pictorial representation of logograms, have later been shown to be incorrect based upon

more recently recognized or discovered syllabic substitutions or phonetic complements.²³

Although this section will be emphasizing the relationships between what is depicted pictorially by both logograms and syllabograms, it must be strenuously emphasized that relying solely upon pictorial evidence for decipherments is very unreliable and fraught

with error. Decipherments that are backed only by interpretations of what is depicted should be treated with the utmost caution or at least accepted only provisionally and very tentatively. Syllabic decipherments should only be fully trusted when they occur in a number of different words and produce readings that are contextually credible in all those instances.²⁴

Logographic decipherments should be accompanied by phonetic complements where available or by their appearance in similar contexts.

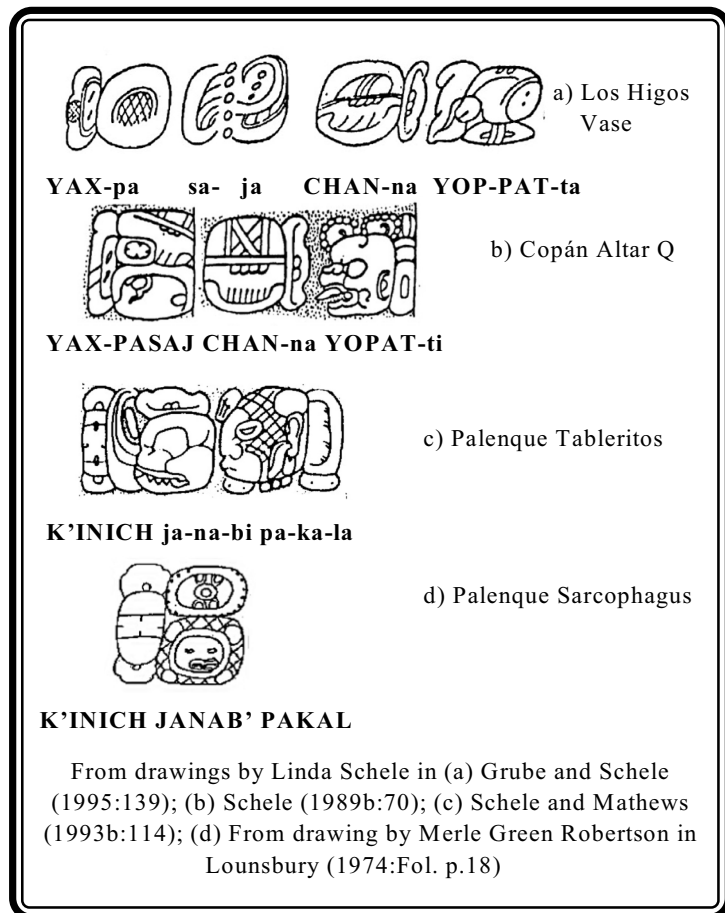


Figure 15. Logographic and partially syllabic spellings of the same names.

²³A well-known example is the decipherment by David Stuart of T767 as **LAKAM** in the phrase *lakam tuun* “big stone” or “banner stone.” This was shortly after Linda Schele and David Friedel’s (1990) publication of “The Forest of Kings” in which Schele deciphered T767 as **TE’** “tree” based upon the plant-like depiction of the glyph. There are numerous examples such as this from many epigraphers who of necessity relied on pictorial evidence for some decipherments until substitutional syllabic, phonetic complement, or more explicit and varied contexts provided more definitive evidence.

²⁴For well-known illustrations of this type of evidence gathering, see Stuart (1987).

Similar contexts in which personal names are written syllabically in one and logographically in another provide excellent evidence of some logographic decipherments.²⁵ Figure 15 shows two examples of this involving the well-known rulers of Copán and Palenque *Yax Pahsaj Chan Yopaat* and *Janaab' Pakal*.

2.2.7.3 Character of Pictorial Content

Despite noting that decipherment should ideally not depend upon the pictorial representations of either logograms or syllabograms, this does not mean that such representations do not play an important role in the writing system. A review of many of the securely deciphered signs should illustrate how pervasive this pictorial connection is. Although the Maya hieroglyphic writing system is not pictographic, as already explained above in Section 2.2.7.1, the source of most signs is demonstrably pictorial or iconographic. This means they depict – more or less abstractly – actions, non-human persons, animals, plants, implements, and other objects. This data will also be used as a background for a discussion of other issues that are currently being debated among epigraphers. These issues include whether there is a need for identifying classes of signs other than logograms and syllabograms.

This data will also serve for analyzing how meaning is conveyed by logograms and precisely at what level ascertaining meaning likely takes place or at what level it should be sought with the most likely chance of success. Does the semantic component of a logogram lie in what it depicts or is it to found at the level of the word it represents? Further, is the relationship of that word and its meaning to what is depicted always the same? If not, what consequences does that have for analyzing how logograms function in the writing system? Does it only make sense to analyze logograms at the lexical or word level or do logograms sometimes represent a sound cluster that could have different lexical meanings? If ascertaining specific lexical meaning while reading or writing requires experiencing or mentally ascertaining the sound cluster represented by a

²⁵For illustrations of this type of evidence gathering see Schele (1989b:120-126).

logogram in its context, must one posit that the logogram has a specific lexical meaning separate from the sounds it represents. For example, must one first posit actual arrival at a specific meaning, for example, of “coyote” for a logogram and then change that conclusion to “leg,” “foot,” or “pole” after noticing that “coyote” makes no sense in a particular context. Or could it be that the logogram calls forth the sound /ok/ which then in context calls forth the appropriate specific meaning indicated by that sound cluster.

Further, how does the relationship of logograms to what they depict compare with the relationship of syllabograms to what they depict? To what extent is this relationship alike and how does it differ? Do the hieroglyphic signs allow or force one to find lexical and grammatical meaning at the level of its signs rather than at the level of words, word compounds, and sentences? Is it not possible or even probable that both logograms and syllabograms function at the level of sound representation. Although, as will be illustrated, most syllabograms in this writing system provide pictorial and iconographic representations as clues, is it not best to analyze these as clues to the specifically intended sound clusters? And if it can be shown that logograms do not always refer to the specific items they depict, is it not valid to also analyze these logograms as calling forth a particular sound cluster whose lexical meaning must be ascertained after the sound it represents is viewed in context? If it is demonstrable in specific cases that this view of the process is more efficient and does not require a series of internal true/false decisions to arrive at a valid perception of the contextual meaning of a specific word, is it not more appropriate to conclude that it is closer to the process that actually occurs? Viewed from a different perspective, whatever the reading process used by an individual Maya reader of the script, is it not better for purposes of understanding how such a system might work, to outline the quickest, most efficient way such a system might function for its readers? It is also of primary importance in analyzing a writing system, to explain how it relates to the spoken language. After viewing the data, the question will also be addressed as to how logograms and syllabograms relate systematically to the spoken language which they are used to represent. The question will then be which analysis of their character and use

provides the most straightforward and realistic theoretical explanation of the relationship between the spoken language and the hieroglyphic writing system used to represent it?

Having emphasized that the Maya hieroglyphic writing system is not pictographic, I have also noted that many of the signs used for both logograms and syllables are demonstrably pictorial, that is, their values are related to what they depict. In order to better understand the relationship of their values to what is depicted and to evaluate how this relates to their use and meaning, a relatively large number logograms and syllables will now be presented and classified in various ways to aid the discussion.²⁶ The glyphs selected are, for the most part, those whose values are accepted by most epigraphers. They have been chosen since our purpose here is to understand how the system functions in representing the spoken language. Avoiding what may be controversial decipherments should help to prevent basing disagreement upon the data rather than upon theories as to how logographic and syllabic signs are used in practice. Note that only a few of the signs will be expressly addressed in the discussion that follows. The identification and corresponding transliteration into the ALMG alphabet of the rest can however be examined in captions accompanying the figures.

2.2.7.4 Grouping of Signs by Pictorial Content: Logograms

2.2.7.4.1 Depiction of Action

We will turn first to logograms divided into groups based upon the type of their pictorial representation. The first group, illustrated in Figure 16, contains logograms that depict actual likenesses of actions corresponding to the words they represent. Figure 16a depicts a snake or worm sticking its head and part of its body usually out of a **yi** glyph T327 + T525. The value of this logogram is **LOK'** which writes the verb root *lok'*

²⁶It should be noted, however, that there is absolutely no attempt nor desire to catalog signs here according to their pictorial content. Such an enterprise would not serve the purposes of this study.

“leave, go out”.²⁷ Combined with **yi** it writes the word *lok’ooy* which, as we shall see later, is a derived intransitive verb form for a class of verbs entailing change of state or motion.²⁸ This example is typical of many that will be identified here, in that one would not likely arrive at its meaning, or at least could not be reasonably certain of it, by simply examining the picture. However, once it is otherwise deciphered or learned,

the connection of what is depicted to its meaning becomes immediately clear. Pictorial representations such as this could provide a good learning tool and also serve as a trigger for one’s memory concerning the meaning of a logogram after it is securely introduced.

Figure 16b shows one of the most common verbs in the Classic texts. It depicts a partially open hand, with fingers oriented downward. Most often the logogram includes a group of small round drops or granules emanating from it. The value of the logogram is **CHOK** and it writes the word *chok*, a verb meaning “throw” as deciphered by Grube (1990:59). It is a root transitive verb and so occurs most often in transitive, passive, and antipassive forms. As others in this group, the depiction closely resembles the way a hand would appear during an actual act of throwing or dropping granules or drops. This resemblance is corroborated by carvings depicting actual rulers performing this action on some of the monuments. While there are a number of words that mean something similar to the depicted action, it is always a particular word that is meant, and this is borne out by

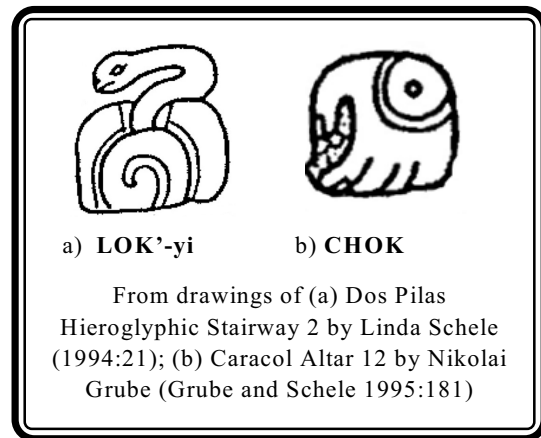


Figure 16. Logograms depicting actions.

²⁷The decipherment of this verb is attributed by Schele (Schele and Grube 1994:21-22) to Nikolai Grube in 1991 and independently by Alfonso Lacadena in 1993. Details of arguments for its value are provided by Schele.

²⁸This whole group of verbs often take the suffix *-VV_{ly}* and their classification is for the most part mediopassive during the Classic Period. However, there is evidence of certain changes taking place in the application and meaning beginning in the Classic Period but becoming very apparent by the Colonial Period (see Section 3.3.2 below).

syllabic spellings of this word in similar contexts, by phonetic complements, and by the consonants of the syllabograms used to write additional suffixes. Such evidence reinforces the argument that logograms are meant to write specific words and not just ideational equivalents that could be directly substituted by homonyms in the same language or by etymologically unrelated words in a different language.

2.2.7.4.2 Depiction of Symbol or Icon of Action

One logogram that depicts an action in a more iconographic or symbolic way is shown in Figure 17. This logogram 'IL provides an iconographic or symbolic depiction of the act of seeing and so writes the word root *il* “see, watch over, attend, witness.” In examples such as this, the depiction is not a clear or obvious representation but instead an iconic representation that probably has to be learned or recognized based upon its use in other contexts. Having once learned it, it is easily recognizable.



Figure 17. Logogram depicting symbolic or iconic representation of an action

2.2.7.4.3 Depiction of Body-part or Tool Used for Action

The next logogram has the same value as that just seen in Figure 17. It writes the same verb even though it is pictorially different. However unlike sign T154 there, it is not an iconic stylized depiction of the action of seeing. The logogram 'IL illustrated in Figure 18a depicts a body part, a stylized eye, probably representing one belonging to a turtle. It too writes the word *il* “see, watch over, attend, witness”.

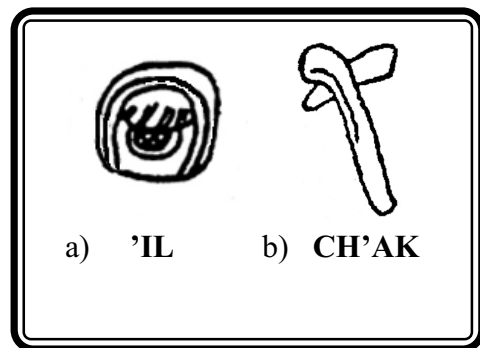


Figure 18. Logograms depicting tool or body-part.

Similarly, besides body parts used for an action, logograms can depict tools used for a particular action to represent the action itself rather than depicting that action in progress. The logogram in Figure 18b depicts an axe, that is, a stone blade infixed into a wooden handle. As a logogram, (T301 as well as T190 and T320), its value is **CH'AK** for *ch'ak* meaning “strike, chop, cut, wound.” Again, selection of a specific tool as a logogram to write a verb meaning “strike, cut,” provides further evidence that the pictorial content, while likely serving as a reminder of the actual value, would alone not be enough to ensure a correct reading of a particular logogram.

2.2.7.4.4 Depiction of Product Produced by Action

The logogram in Figure 19a depicts hair tied with a rope or string. Barrera Vásquez et al. (1980:542) note that in colonial Yukatek *mut pol* is a ring or ribbon that a woman puts around her hair or head.²⁹ In Tzotzil *mut* is a verb meaning “tie up, bind” and this is likely the target word indicated here. Since *mut* has various

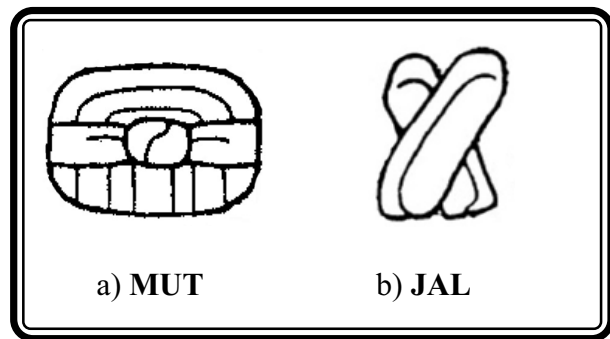


Figure 19. Logograms depicting product generated by an action

other meanings in related languages, it is possible that it may be used as a rebus here, that is, that it does not mean specifically “tied hair” or even “tie” but rather “bird” or “report, news.” But its contexts are mainly limited to the Emblem Glyphs of Tikal and Dos Pilas making it difficult to be sure of its literal meaning other than as a place name.

While it may not be as widely accepted as a value for a logogram as most of the others presented here, **JAL**, as deciphered by MacLeod (1992), is recognized by many as the value for T153 shown in Figure 19b. It possibly depicts two crossed threads or pieces

²⁹The relevant entry is “rodete hacer la mujer de sus cabellos” (“roll made by the woman out of her hair”).

of material and may therefore be the product of weaving which is *jal* in Colonial Tzotzil (Laughlin 1988:205) and *hahr* in Ch'orti' (Wisdom 1950:459).

2.2.7.4.5 Depiction of Result of Action

One of the most common logograms in the Classic inscriptions, which are predominantly interested in events related to rulers and their states, is shown in Figure 20a. It depicts a stylized side view of a seated person, probably cross-legged, and has the value **CHUM**. In other words, it depicts stylistically what one would see after the action indicated by the word it

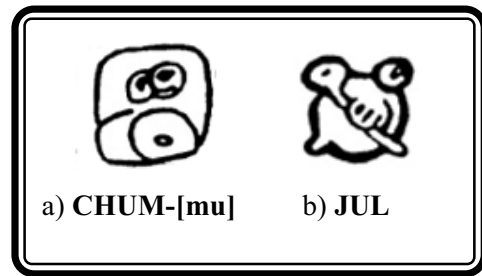


Figure 20. Logograms depicting the result of an action

represents. It usually has an infixed **mu** syllabogram to indicate that the intended word root ends in the consonant *-m*. Probably because there are several possibilities for “seating” and similar positions, this infix is usually present in this logogram. The circle with a dot in the center that is also often present indicates that a human body part is being depicted, as has been suggested by epigraphers for some time.³⁰

The use of syllabograms as phonetic complements, as here in the case of **CHUM**, suggests that what is most important is reading the sound of the intended word and not merely recognizing the depicted act. Instead, it is a particular word that is targeted and not simply the concept of a particular idea that could be expressed with various synonyms.

The logogram shown in Figure 20b provides another example of the depiction of the result of an action. It portrays what is likely a bone awl spearing another glyph. Its value is **JUL** and writes the verb root *jul* “pierce, spear, chisel” (in Tzotzil Laughlin 1988:215-216) or “throw” (in Chontal Knowles 1984:424; in Ch'orti' Wisdom 1950:472-

³⁰The only detailed investigation into such markings on Maya hieroglyphic signs that I know of is that of Nicholas Hopkins (1994).

473).” The glyph that the awl pierces is most often the syllabogram **lu**. As such, it provides an alternative to the approach taken for logogram **CHUM** by having the awl partially infixed in the syllabogram **lu** instead of the syllabogram **mu** being infixed in the logogram. The appropriateness of placing the pictorial awl in the syllabogram **lu** instead of vice versa also reflects the type of wordplay and pictorial punning often seen elsewhere in the Classic Maya writing system.

2.2.7.4.6 Depiction of Object, Animal, or Other Being

The logogram in Figure 21a represents a stylized flame or fire. Its value is **K’AK’** and it is sometimes accompanied by a phonetic complement *k’a* (T669) as in Figure 21b. The word *k’ahk’* means “fire” in the Ch’olan and Yucatekan languages. There are some instances in which it is accompanied by the syllabogram **tz’i**

and so may have the value **B’UTZ’** meaning “smoke.” However, because both combinations sometimes occur in practically identical contexts, it is possible that it may still have the value **K’AK’** even in those instances in which it is accompanied by T563a **tz’i**.

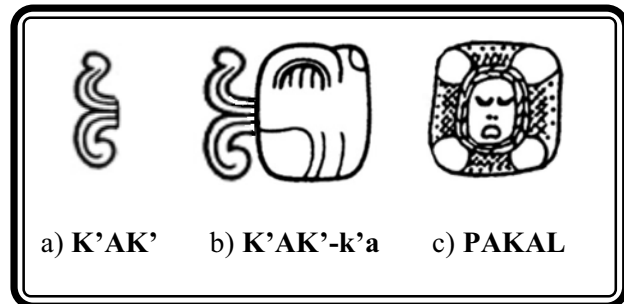


Figure 21. Logogram depicting object, animal or other being

Figure 21c shows a logogram with the value **PAKAL**. In Ch’olan, Tzeltalan, and Yucatekan, *pak* means “fold over, such as cloth.” Bolles documents its use as “shield” in names and compounds from Colonial Yucatek, although it was otherwise replaced by the Nahuatl word *chimal*. Most of the shields used by the Classic Maya seem to be made of thick, doubled-over cotton which is likely the source of the meaning “shield” in these contexts. Since it is spelled both logographically and syllabically in the name of the most

famous, long-lived ruler of Palenque deciphered by David Kelley (1968:258), there is no doubt that the value of the T694c logogram is indeed **PAKAL**.³¹

2.2.7.4.7 Depiction of Part Standing for Whole Object, Animal, or Other Being

The logogram in Figure 22a (T614) depicts thatch from the roof of a house and has the value 'OTOT. In context, it is usually accompanied by the syllabogram **ti** and is almost always possessed. As such it appears as **yo-'OTOT-ti**. This logogram is a good example of the role that pictorial representation plays in the script. In itself, the stylized thatch would not be enough to indicate that the logogram writes *otot*. Still, once

other indicators make it clear that this is its value, then the thatch can serve as a reminder or memory jogger that *otot* is meant. It is likely that the pictorial character of such logograms were useful both for those learning to read as well as to write the script.

Figure 22b shows the logogram **MO'** (T238). It depicts a partial view of the head of a macaw including the eye and beak. But instead of referring to or writing a word for "beak," "eye," or "head," it writes instead *mo'*, the word for "macaw." In the 19th and early 20th century, glyphs and iconography portraying the beaks of macaws had been used to argue for the presence of elephants among the Maya (cf. drawings by Jean Frédéric Waldeck and arguments against this view in Thompson 1927). More recently, this logogram has sometimes not been adequately distinguished from T228/229 and T743,

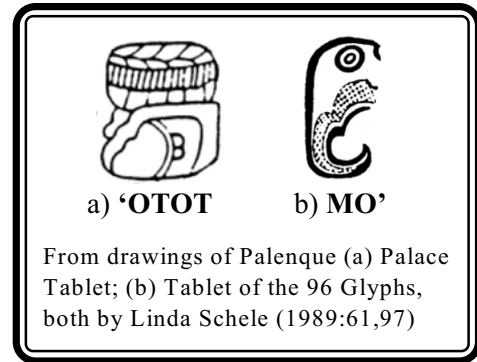


Figure 22. Logograms depicting part standing for whole

³¹This is true with the proviso that T624a and b are actually a combination of **JANAB'** > *janaab'* and **PAKAL** > *pakal* and that the actual sign in the illustration is somewhat different from T624c but has the same value and is not included in Thompson's (1962) catalog.

syllabic 'a, as noted by David Stuart (2002) for the name of the Palenque ruler *Ahkal Mo' Naahb*.

2.2.7.4.8 Depiction of Symbol or Icon of Object, Animal, or Other Being

The glyph shown in Figure 23a (T544) has the value **K'IN**. *K'in* (*k'iin*) means “day, sun” in the Ch'olan and Yucatekan languages. Although the connection between a flower and the sun may not be unusual, its use in both iconography and in the texts themselves in date contexts makes its decipherment as **K'IN** more than likely. Its usual accompaniment by the syllabogram **ni** further reinforces this identification.

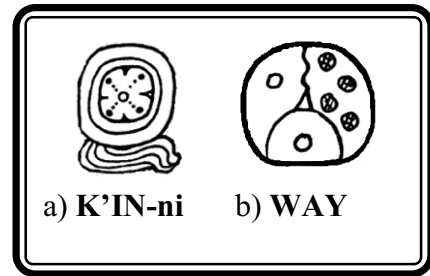


Figure 23. Logograms depicting symbol or icon of object

Figure 23b illustrates the logogram **WAY** (cf. Houston and Stuart 1989; Houston 1989a; Grube 1989a; Grube and Nahm 1994). It depicts a face similar to the **AJAW** glyph on its right side (viewer's left) which is covered with spots on its left (viewer's right). These are the spots most often associated with those of a Jaguar. The word *way* refers to one's animal or non-human other, similar to what is known in Nahuatl as a *nagual*. Although this word does not usually function as a rebus, it still has a variety of related meanings that can be referred to with various forms of the same word. While it depicts iconographically or symbolically the connection between a person and his/her animal spirit, it can be used in various contexts and compounds to mean “sleep, dream, bedroom, and shaman.” When it means bedroom, it requires a suffix such as *-ib* and when possessed also an *-il* suffix. The two suffixes then result in *-(i)b'il* finally producing *wayb'il*. When it refers to shaman, it usually takes the suffix *-al* for *wayal*. But all of these different meanings might be difficult to explain, at least initially, if what it represented was just “animal other, nagual.” This is true even though there is a likely connection between all of them centered in the idea or concept of “dream.”

What is of most immediate importance for a reader is the apprehension of a particular word and not of a vague or abstract idea. It is only with the additional awareness of the specific suffixes and the rest of the context that the appropriate meaning can be grasped. That is also why using one's own language rather than the one originally written to represent a logogram is not appropriate for the actual task at hand. That is also why it is not helpful even to use other non-homophonous words in the original language even if they share a similar meaning. It would seldom be the case that the full range of meanings and connotations intended in various contexts would be matched adequately by several different words. This becomes even less likely when all the connotations and meanings would have to allow for the various compounds and the various affixes that can be formed using a particular root. In effect, then, the value sought and assigned has to be based upon its actual sound and not just upon possible meanings taken out of context.

2.2.7.4.9 Depiction of Gesture

The logogram shown in Figure 24 (T329) has the value **JUN**. *Ju'n* (with varied spellings) is the word for the number one in Ch'olan and Yukatekan. It is not just the portrayal of one finger that indicates the number. Instead, this logogram depicts a raised thumb which is the gesture to indicate the number one rather than the index finger which is used for that purpose in some other cultures. This is still the usual gesture for the number one in the Maya area today.³²

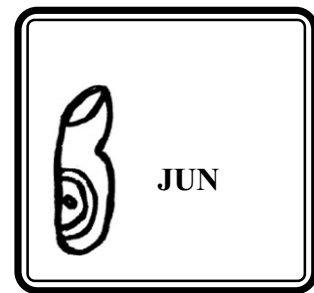


Figure 24. Logogram depicting gesture

³²Of course, this is also the common gesture for indicating "one" in many other areas as well, including Europe. In the U.S.A., it is more common to use the index finger to indicate "one."

2.2.7.4.10 Depiction of Icon for Item That Uses Object

Figure 25 depicts a human footprint. However, this logogram does not write the writing the equivalent of “footprint” or “foot.” Instead, its value is **B’IH**. It writes the word *b’ih* which is the word for road in Ch’olan. The word in Yukatek is *b’eh*. So **B’EH** may be its value in some parts of the Madrid and Dresden Codices. However, in the Dresden Codex on page 41c, the word for road is spelled out as **b’i-hi** for *b’ih*.³³ This occurs in a section of the codex in which the Ch’olan language is used (cf. Wald 1994b, 2004a).



Figure 25. Logogram depicting icon or symbol of item that uses the object

The T301 logogram shows pictorially either a track left behind when walking barefoot on a road or a foot which is used to walk on roads. Again, although the image can be recognized by anyone seeing it as feet, one would need to know the iconographic or symbolic connection to roads in order to know its lexical equivalent. In any case, even for the modern epigrapher, once the connection has been made using substitutional and contextual arguments, the footprint image easily conjures up the Maya road. Footprints are used iconographically to indicate travel in several central Mexican codices as well. However, it is not clear that they designate travel specifically on roads much less whether they might refer to the word for “road.” They may instead be used more as arrows sometimes are in on traffic signs to point out the direction of movement. However, a direct connection with the word *b’ih* or *b’eh* is made clear in the Dresden Codex example.

³³There are some who refer to Landa’s “alphabet” as evidence that what is being written in the Dresden Codex is **b’e-hi** instead. Both T301 (Footprint) and T585 (Quincunx) are identified in Landa’s “alphabet” as “b” (cf. George Stuart 1988). It should be noted that the value of the vowel is not stated. In the same “alphabet,” “l” is another consonant for which two examples were given. These have since been securely demonstrated as writing two different syllables, **le** and **lu** and both of these values are attested in the Dresden codex as well. T568 **lu** is never attested in any context in which it should have the value **le** instead. In sum, arguing from the Landa “alphabet” for a value of **b’e** instead of **b’i** for T585 is not valid.

2.2.7.4.11 Depiction of Object Made of Specific Material

The logogram shown in Figure 26a has been deciphered as **HUN** based upon syllabic substitutions in clear contexts and the presence of the phonetic complement **na** in some examples such as in the so-called “Lords of the Night” in the signs for G3, G8, G9 and F of the Long-Count Introductory series (cf. Thompson 1950:Fig. 34). Based upon both its appearance, which includes a knot, and its use in context, it has been translated as “headband,” but the basic meaning of *hu’n* is “paper.” However, there is evidence that the word *hu’n* is also used to refer to specific things made of paper. For example, it is used for “book” in all the related languages. One of the most common sentences in which it is used on the

monumental texts is shown in Figure 26b. Although the verb root *k’al* in this context is translated as “tie” or “wrap,” following Stuart (1996:154-158) and MacLeod (1991:2), it has a broad range of meaning and can also mean “close, take, hold, receive.” There is, however, a more direct statement on Naranjo Stela 32 which uses the verb *kach* whose basic meaning is clearly “tie.” The sentence *kahchaj usay hu’n* makes a reference to mulberry bark paper: “the mulberry-bark paper was tied.”³⁴ Although it may be in the shape of a headband and it may be that a headband is referenced, the word *hu’n* literally means “paper” and not “headband.” I have found no colonial or modern sources that refer to the extended meaning “headband.” The relationship to “headband” may therefore

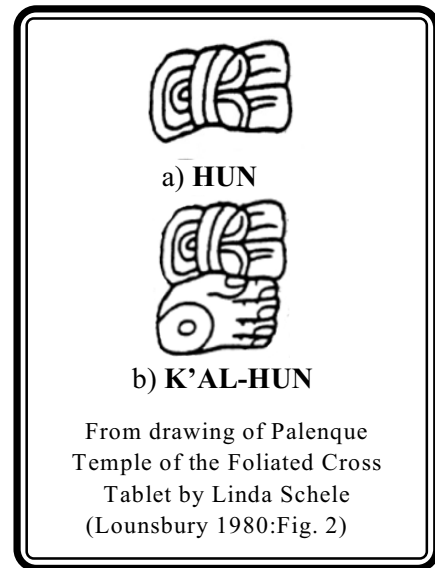


Figure 26. Logogram depicting object made of material referred to by word

³⁴For the mulberry reference see Laughlin (1988:296): “*saya-Hun*, . . . mulberry tree” in Colonial Tzotzil. Brian Stross (pers. com. 2007) has suggested that the mulberry may have been imported from Europe. If so, the reference here may actually be to a different tree that might be similar to the mulberry.

be ethnologically rather than linguistically determined. The use of *hu'n* referring to paper and books is well documented both in the Classic period and in the modern languages.

2.2.7.4.12 Brief Comment on Pictorial Content of Logograms

Prior to this brief sketch and sampling of the pictorial content of logograms in the Classic Ch'olan script, arguments were offered that logograms write words rather than represent ideas or concepts without the use of words. This look at different types of pictorial content indicates that the depicted objects are more suitable for use in learning and recalling the words written by the logograms than for representing directly an idea or concept without the use of words. Much of the content is quite abstract, symbolic, or iconic and would clearly serve better as memory joggers for particular words than for direct representation of concepts. However, this aspect of the character of the pictorial content of logograms represents only part of the argument for the view of the writing system that is being proposed in this study.

2.2.7.5 Grouping of Signs by Pictorial Content: Syllabograms

While it does not seem unusual that logograms in the Maya hieroglyphic script have pictorial content, it is perhaps more surprising to discover that the pictorial content of many syllabograms can be rather easily recognized. Just as in the case of logograms, or perhaps even more so, pictorial evidence for their actual value is not the most important or reliable. Other evidence plays the cardinal role in decipherment. Tracking their use in different words that require the same syllable is very important, especially when the contexts in which they occur are quite clear. Sometimes, their use as phonetic complements with known logograms can also provide evidence, at least for its consonantal content. The types of pictorial content are very similar to those of logograms.

2.2.7.5.1 Depiction of Action

The syllabogram in 27a (T203a), **tz'u** provides a very good example of a pictorial representation that might not at first glance provide a clear hint to its actual syllabic value. However, once that value is otherwise discovered and supported, its depiction of a fish sucking on an object makes its value hard to forget. Colonial Tzotzil (Laughlin 1988:181) has *tz'utz'* as “suck (as when they suck a bone)”; and Modern Tzotzil (Laughlin 1975:104) as “suck, drink, . . . suck out.” For Ch'orti' Pérez Martinez et al.

(1996:233) have *tz'ujtz'in* as “besar, chupar el hueso, el tuetano” (kiss, suck a bone, marrow). One could possibly also make a case here for *tz'un* instead of *tz'utz'* as the source. Wisdom (1950:741) translates *tz'u'* as “sip, a sipping.” Aulie and Aulie (1998:133-134) provide both words *tz'u* and *tz'u'tz'un* as “chupar” and *tz'ujtz'un* as “besar.” Kaufman and Norman (1984:134) reconstruct Proto-Ch'olan **tz'uhtz'i* as “besar // kiss,” related to Tzotzil *tz'utz'* “chupar,” and **tz'ub* as “chupar // suck.” Since the meaning of the words is so closely related, it is not completely clear which of the two the original source might have been. That it was one or the other remains quite likely.

The syllabogram in Figure 27b (T219) is **chi**. Pictorially, it depicts a hand in a position ready to grasp or pick up something with the thumb and index finger. This may be based upon the word *chik'* which in Ch'orti', means “to pick up with the fingers, crush with the fingers, to eat by hand” (cf. Wisdom 1950:701, Pérez Martinez et al. 1996:42).³⁵

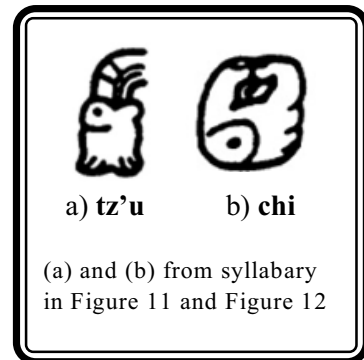


Figure 27. Syllabograms depicting action

³⁵Note, however, that *chik'* does not seem to appear in Ch'ol or Chontal with that meaning and has not been reconstructed as Proto-Ch'olan by Kaufman and Norman (1984).

2.2.7.5.2 Depiction of Result of Action

A very common syllabogram, especially in the texts of the sites that primarily use the preposition *ta* instead of *ti*, is that shown in Figure 28a (T103). It consists of a band across the middle with an object extending out both sides. This may be a representation of something tied or attached in a bundle and so may be related to the word *tak* ‘fasten, tie, join, attach.’

The value of the syllabogram in Figure 28b (T507) is quite certainly **tzi** (cf. Stuart 1987:16-25) but what it depicts is less so. Presented as a possibility is the word *tzihtz*. It means “a sprinkle, a sprinkling, a scattering broadcast” in Ch’orti’ (Wisdom 1950:729, Pérez Martínez et al.1996:223) “rociar” (“sprinkle”). This is considered possible because the only secure difference between T506 and T507 are the sprinkle-like dots stretching out from the center of the latter sign.

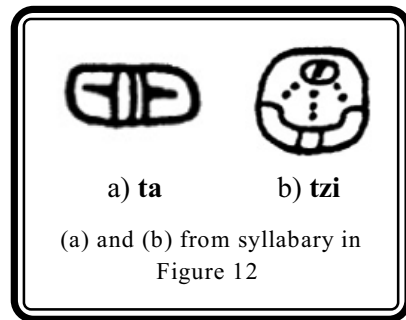


Figure 28. Syllabograms depicting result of an action

2.2.7.5.3 Depiction of Body-part

The pictorial content of the syllabograms shown in Figure 29 is based upon parts of animal or human bodies. For each, what is depicted and its value is based upon the actual part and not the whole of which it is a part. Figure 29a has been deciphered as the syllable **k’a**. Pictorially, it depicts the back of a left hand or fist. It most likely derives from the word *k’ab* ‘hand, arm’ in Tzeltalan, Ch’olan and Yucatekan. As is almost always the case with syllabograms, the last consonant of the word has been dropped to form the CV syllable.

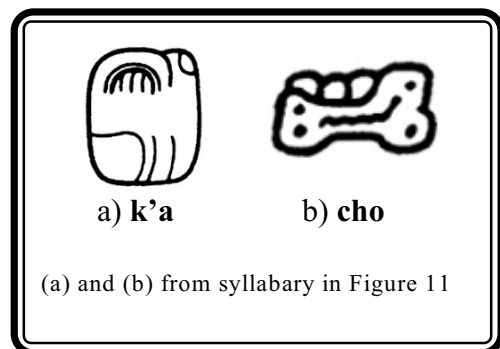


Figure 29. Syllabograms depicting body parts

The syllable in Figure 29b (T590) likely depicts a mandible or jaw from the side. Although it provides a skinless or skeletal view, the emphasis is probably on the area of the face rather than on its defleshed condition. The word *cho* or *choh* is usually given as “cheek” in colonial and modern dictionaries. In Colonial Tzotzil (Laughlin 1988:191) *cho* means “cheek” and in Chontal (Keller and Luciano G. 1997:94) *choj* is “mejilla, chachete” (“cheek”); Kaufman and Norman (1984:118) reconstruct **choh* as “cheek” for Proto-Ch’olan.

2.2.7.5.4 Depiction of Object, Animal, or Other Being

Although broadside views of animals are understandably not common because of a partially followed strategy of constricting their size, there is one, shown in Figure 30 that occurs several times in the texts. This is **ka** (T203b, T738a,b). The likely source of this is the word *kay*, for “fish.” However, in Tzeltalan and Ch’olan, this would be *chay* instead of *kay*. Some have argued that this calls for a Yucatekan

origin of the glyph, but I believe it is more likely that it has been carried over from a time before the Greater Tzeltalan sound shift from *k* < *ch*. At least so far, there is no demonstrable evidence of writing in Yucatekan earlier than the Late Classic and Post-Classic period. Instead, it is possible that early forms of the writing system may have been in place already at a time earlier than the split between Tzeltalan and Ch’olan and that this particular sign was taken over from a Pre-Classic system. Also, there is evidence of the awareness of this sound shift among the Maya, since it is reflected in the specific use of *Kan* instead of *Chan* in names of a city, certain members of royal families, for example at Palenque, and in certain non-human beings.

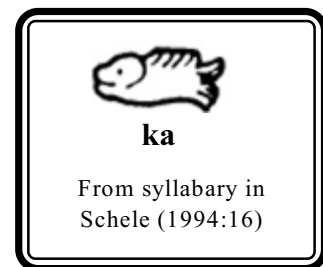


Figure 30. Syllabogram depicting an animal

2.2.7.5.5 Depiction of Part Standing for Whole Object, Animal, or Other Being

Since it is easier, given the limited space, to represent parts of animals that stand for the whole, this group is larger than the previous one. The use of a fish fin in the logogram in Figure 31a to stand for the whole fish is not surprising. This is again **ka** from *kay*, probably a Pre-Proto-Greater Tzeltalan form.

The syllables in Figure 31b-c show a turtle head and turtle beak respectively. The word *'ahk* means “turtle” in the Ch’olan languages. To form the syllable, the second consonant was dropped resulting in *'a*. Again, I prefer to represent this syllable as *'a* instead of just *a*, and, as already argued, believe that the system itself reflects an overall approach that views syllabograms as CV syllables. However, as will be argued later, very weak consonants such as glottal stop, glottal /h/, and to a lesser extent, even laryngeal /j/ tend to be ignored (elided) at times in speech. It should also be noted that this tendency to elide such weak consonants can be occasionally noticed not only in the Classic script but in the closely related Mayan language families such as Tzeltalan, Ch’olan, and Yucatekan as well as other Mayan languages.

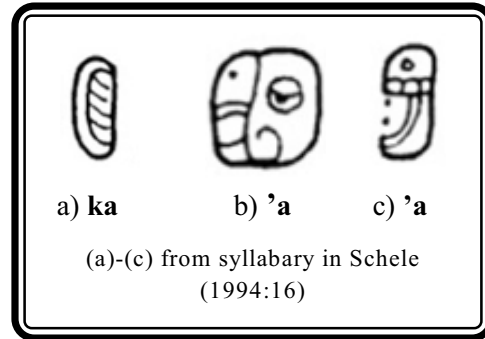


Figure 31. Syllabograms depicting parts of objects, animals, or other beings standing for whole

2.2.7.5.6 Depiction of Symbol or Icon of Object

The syllabogram in Figure 32a (T116), **ni**, was thought some time ago to be **ne**, derived from *neh* “tail” since that seems to be what it depicts. The lexical contexts in which it is used and substitutional arguments have shown that its value is instead **ni**. So, despite its similarity to an

animal’s tail, it is probably related more closely instead to *ni*’ which is “tip, point, nose, beak, etc.” in the Ch’olan languages as well as in the Tzeltalan languages and can be reconstructed for Proto-Mayan as *ñii*’ (Kaufman and Norman 1984:127). It may depict the end of a leaf or some other similar object although exactly what is not clear. Its field of applicability is very broad as attested by the examples given by Wisdom (1950: 541). Its connection instead to a word meaning “tip, point, nose, beak” may be stressed in the portrait version of the syllable **ni** shown in Figure 32b which has the **ni** sign attached to or protruding from the bottom of the depicted person’s nose.

Another syllabogram that depicts a somewhat abstract concept can be seen in Figure 32c-e. (T149). In each case, what is depicted is two objects, usually a pair of oval shaped articles. Kaufman and Norman (1984:127) reconstruct **nut*’ with the meaning “pegar, juntar,” that is, “join,” as for example, joining two things together. But Wisdom (1950:548) makes it clearer why this word or a homonym could well be the source for the syllable **nu**. Besides being a verb “to join, splice, bunch,” it is also used as a numeral classifier referring to things joined or bunched. Even more explicitly, *nuht*’ also means “pair.” He lists *innuht*’ as “a (one) pair of” and *in nuht’unak’niut* as “my two eyes.”

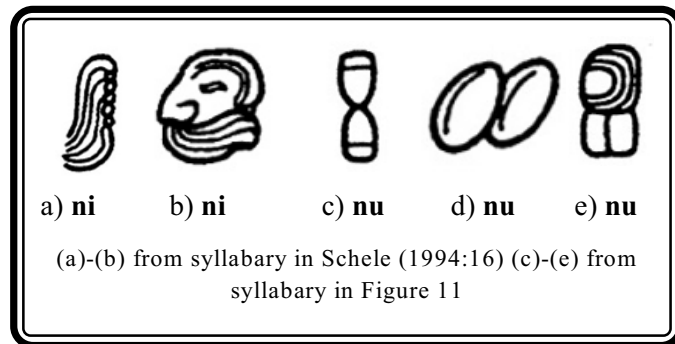


Figure 32. Syllabograms depicting symbols or icons of objects

2.2.7.5.7 Depiction of Body-Part or Plant-Part

The syllabogram (T115) shown in Figure 33a depicts what is likely a leaf. In the Ch'olan languages “leaf” is *yop*. In use it may carry the ergative pronoun since leaves are considered as always belonging to a plant or tree (cf. Wisdom 1950:769; Kaufman and Norman 1984:137). It shares this characteristic with **ya** since the source of that syllabogram’s pictorial representation *yat* also carries the ergative pronoun in ordinary use. That is why it would make sense to drop the final consonant from *yop* to produce the syllabogram **yo**.

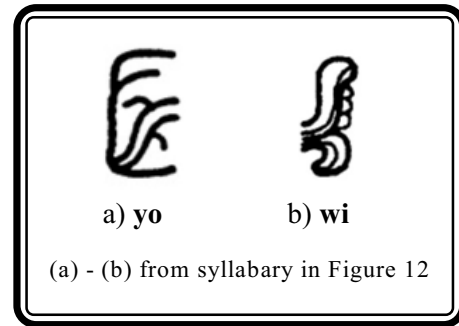


Figure 33. Syllabograms depicting body-part or plant-part

Figure 33b illustrates the syllabogram **wi**. It depicts, in a stylized way, the root of a plant, which is *wi'* in the Ch'olan languages.

2.2.7.5.8 Comment on Pictorial Content of Syllabograms and Logograms

Before moving on to examine characteristics of logograms and syllabograms other than their pictorial content, it is worth mentioning that the pictorial content of logograms and syllabograms is surprisingly similar. That is, both logograms and syllabograms most often depict, either straightforwardly, or iconically and symbolically, similar kinds of things such as actions, animals, body parts, and other objects. The difference is that in the case of logograms, the sign writes words or word roots, and in the case of syllabograms, the sign writes syllables based almost exclusively upon a word or word root minus its final consonant.

Although the following discussion will point out some exceptions to this characterization, these exceptions deserve to be evaluated on the basis of whether they indeed represent the main thrust of the writing system. For example, there are several two-syllabled logograms. Are these truly exceptions or do they represent the main thrust of the system? Is there something significantly different about these words that might

indicate they are exceptions of the kind one might encounter in a natural language and in a writing system that was adapted to that language? Or are they instead an indication that the characterization of logograms just provided is incorrect?

There are also a couple of logograms that can be used as suffixes rather than just as words or word roots. Does this warrant viewing as one of the main purposes of logograms to write affixes? Or are these rare exceptions motivated by some feature of the affixes they write?

Also, there seem to be some signs that cannot be tied down securely over time as either syllabograms or logograms. What effect might they have upon a general theory as to how the writing system operates? Does this mean that the overall division between syllabograms and logograms is not correct? Do the exceptions require a change in the general rules or theory of how the system functions? Or could they also be a sign of historical developments or local variation in the interpretation of specific signs? Is there some feature such signs share that might help to explain their development over time?

Finally, are there signs that do not fall under the classification and definition of either syllabograms or logograms and so require the addition of other basic classifications of the types of signs the system employs? Would such an expansion in sign categories make the whole system easier to understand? Would it provide better insight into how the system actually works? Or would it rather simply create an overlay of complexity at the writing system level that has already been handled at the level of the actual language being written.

2.2.8 Classification of Logograms and Syllabograms by Other Criteria

2.2.8.1 Logograms That Write Two-Syllabled Words

The structure of most Maya roots is CVC, that is, composed of a single syllable beginning and ending with a consonant, a so-called “closed syllable.” Of course, there are exceptions in each Maya language, many of them due to the loss of one of the two consonants over time. Here,

however, we are concerned with lexical stems that are made up of more than one syllable. For all practical purposes, this includes those made up of two syllables, that is, CVCVC. The values of all the logograms shown in Figure 34 are two-syllables long. It is significant that whatever their reason for comprising two syllables, there are basically no single-syllable words that refer to the same entities in the related languages. Also, except for one of them, *lakam*, which is an adjective, the words represent actual objects and are nouns. Since they are two-syllable nouns, the only other option would be to write them out syllabically using three syllabograms.

Of all the examples, the form taken by **PAKAL**, in Figure 34a (T623), may be the easiest to explain. It depicts a shield. In Ch’olan, Tzeltalan, and Yukatekan, the root of the word *pak* means “fold over, such as cloth.” Bolles (2001:2884) also documents *pakal* as “shield” in names and compounds for Colonial Yukatek, although it was otherwise replaced later by the Nahuatl word *chimal*. Most of the shields used by the Classic Maya seem in depictions to be made of thick, doubled-over cotton which is likely the source of the meaning “shield” in these contexts. Since it is spelled both logographically and syllabically in the name of the most famous, long-lived ruler of Palenque (cf. Kelley

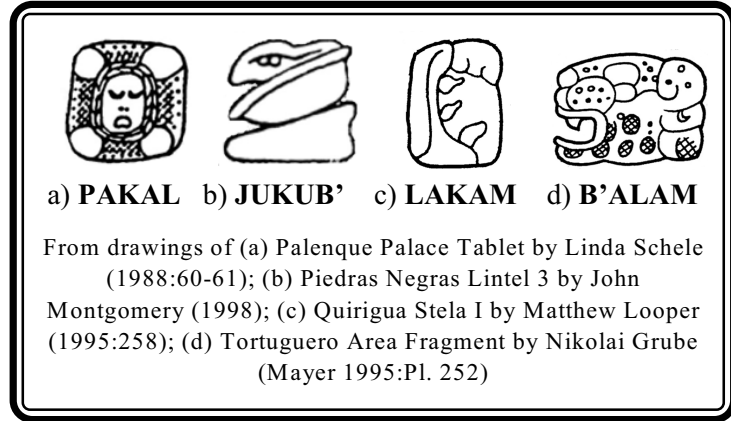


Figure 34. Logograms that write words of two syllables

(1968:258; Mathews and Schele 1974), this logogram has been securely deciphered for some time. Although this logogram contains what appears to be a suffix as part of its value, it must be remembered that *pak* alone does not mean “shield.” It occurs otherwise as an adjective *pakal*, perhaps based upon a participial form of the verb, with the meaning “folded over.” Because shields of this type were made of cotton folded over a number of times, it may then have come to be used as a noun for “shield.” If this is true, the *-al* suffix was then reinterpreted as part of the noun rather than being an adjectival or participial suffix. In this way, the logogram stands for the word *pakal* and not for an adjective or verb root and its suffix.

Although a possible origin of the word *pakal* can be adequately explained, this is not as easy for the rest of the examples. Figure 34b is a logogram **JUKUB'** whose lexical form looks capable at first of being easily explained. The word *jukuub'* means “canoe, dugout.” Since *-Vb'* is a widespread suffix for deriving instrumentals, one might expect the root *juk* to be enlightening. However, it does not seem to be. The closest word with a related meaning seems instead to be *jub'* which is a verb meaning “row” [a boat] in Colonial Tzotzil (Laughlin 1988:215). However, *jub* with this meaning almost seems to be the result of ellipsis working on the original word for “canoe” *ju[kuu]b'*.³⁶ More apropos here is attestation of lexemes almost identical to *jukuub'* with the meaning “canoe” in over a dozen Mayan languages by Kaufman (2003:995) and his classification of it as Common Mayan with possible multiple etymological reconstructions. Thus it is likely a word that has preserved a fossilized *-ub'* instrumental in Classic Ch'olan as well as *-ub'* or *-u'* in others. This is a clear signal of its practical status as a quasi-root word rather than a root plus a suffix. It is this status which allows it to qualify being written with a logogram.

The last two logograms in Figure 34 also likely write words that represent “fossilized” forms although describing their makeup is equally tantalizing. For example,

³⁶This etymology appears even less certain in light of the word *jom* which in Colonial Tzotzil (Laughlin 1988:213) does indeed mean “boat, canoe, ship.”

there is ample evidence in Yukatek for *lakam* in Figure 34c as an adjective meaning “large.” However, other than the suggestion that the final *-am* may be a variation of *-an*, which Bolles notes is a passive participial suffix in Yukatek, it is not clear what the root might mean in Colonial Yukatek. Ch’ol (Aulie and Aulie 1999:61), however, has *lac* as an adjective meaning “agarrado (objeto largo)”, “grabbed (large object)” and *laca* as “puesto (objeto largo),” “placed (large object).” In both cases, the meaning seems to reflect a participle. Thus, the form *lakam* as a “large placed object” may very well reflect a variant of the *lakan* participial form in the Classic texts. As such the form could be used adjectivally and be viewed as a single unit rather than a root and a suffix.

Important for the argument being made here is that most of these two-syllable CVCVC lexemes are, or have become, words standing for entities or attributes that no longer seem to be actively analyzed as roots plus suffixes. Others may have been borrowed from other languages as a unit, such as, perhaps *b’ahlam* which is shown in Figure 34d. Although it is also possible that it too reflects an original participial form, it is not apparent as to how it would have derived from the possible roots *b’al* “roll, roll up” or “contents” in Proto-Ch’olan (Kaufman and Norman 1984:116). The word *b’ahlam* “jaguar,” however, is present as such in many of the Mayan languages and so has been reconstructed for Proto-Mayan as well (cf. Kaufman 2003:594). Q’eqchi’ has a meaning for *b’alam* that seems to offer possibilities of revealing a source: “algo escondido” (“something hidden”) (Sedat 1955:28) and “condición de estar escondido” (“state of being hidden”) (Sam Juarez et al. 2001:27). Again, if this is indeed the origin of the word for *b’ahlam*, it too could be identified as originally derived as a participle, or in this case a gerund, from a likely verbal root. Unfortunately, it is also possible that the meaning “hidden” derives instead from the habits of jaguars rather than vice versa.

What is most relevant and important here, is that these forms have all likely been reinterpreted as words that are no longer viewed as forms made up of roots and suffixes but rather seen as individual units. It is for that reason that they can then become the pictorial subject of individual logograms. It is from the standpoint of their being viewed

as words rather than as word roots plus suffixes that likely underlay their being written as logograms.

2.2.8.2 Composite or Conflated Logograms Both with Individual Phonetic Values

The logograms in Figure 35 are composites of two logograms with each logogram retaining its original value. Some of the most well known of these composite logograms come from the names of Palenque rulers. The phonetic spelling of long-lived *Janaab' Pakal's* name is shown in Figure 35a. The same name, *Janaab' Pakal* appears as two separate logograms in Figure 35b. Finally, Figure 35c shows the same name but in a single composite glyph resulting from the conflation of two logograms. Nevertheless, the value of each logogram is preserved. The actual meaning of *janaab'* is not clear, but *pakal* is a word for “shield.”

The name of *Janaab' Pakal's* son in Figure 35d is almost always presented as a composite logogram. It is *Kan B'ahlam* “snake jaguar,” and so the logogram writing his name contains pictorial elements of both a snake head and a jaguar head.³⁷ In the context of *Kan B'ahlam's* name, “snake” is *kan* rather than *chan* as is indicated several times in the inscriptions by a **ka** syllable preceding it as a phonetic complement. While some suggest a Yukatekan influence, it seems more likely that the use of *kan* (or *kaan*) instead of *chan* for snake parallels a common practice worldwide even now in which names of people, places, and supernatural beings are sometimes preserved in their older forms. The presence of the **ka** phonetic complement preceding the logogram for “snake” is limited precisely to such names. Thus, they would have had their origin sometime no later than about A.D. 100 since the sound change from *k* > *ch* would have likely happened before that date. The presence of a written language could also serve to preserve such names even after a sound change had taken place.

³⁷The two glyphs **KAN** and **B'ALAM** as they appear separately in other contexts are shown in Figure 48c and 34d, respectively.

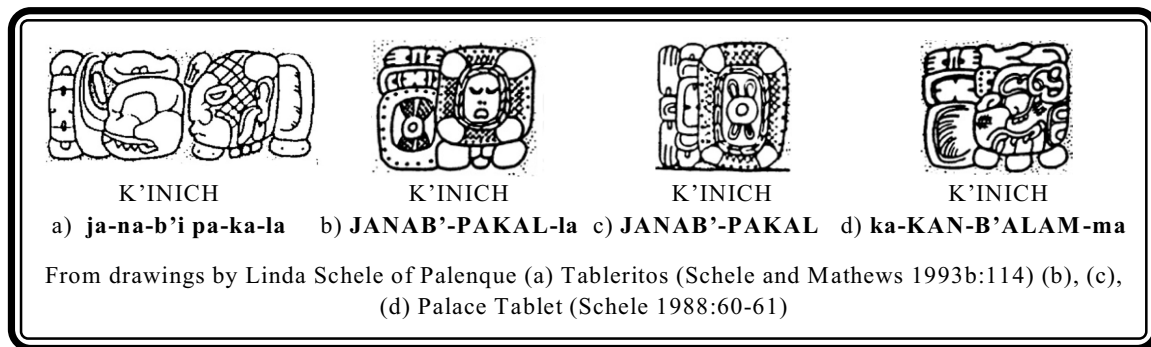


Figure 35. Composite or conflated logograms, each preserving its own value

A further lesson to be learned from the use of composite or conflated logograms is that their decipherment or interpretation is often dependent upon the contexts in which they are found. Without that context, it would not be clear how to interpret a logogram that contains elements of two different signs as, for example, in the case of one which includes traits of two different animals. Once one knows the context and, for example, how the same ruler's name may be written in such contexts, one has a better chance of reading or deciphering them. Even then one would almost have to know beforehand in which order the signs are to be read and that the writer intended that two different logograms be represented in one composite glyph.

2.2.8.3 Polyvalent and Carrier Glyphs Including Both Logograms and Syllabograms

The next set of signs include those which most epigraphers would agree are polyvalent, that is, they are signs that have more than one value but in different contexts. Historically, the number of signs that have been considered polyvalent have far surpassed the number of those for which such claims have actually withstood the test of time. Also, some of them include additional features which usually help the reader determine which value is intended, but this is not always the case. Examining them should make it clearer that, even more than composite glyphs, the existence of polyvalent glyphs emphasizes the importance of context for reading Classic-Maya writing.

2.2.8.3.1 Signs Basically Identical in Form but Value Varies Depending upon Context

What Thompson lists as number, T1000a,b and T1002a,b,c, are probably all variations of the same basic glyph in three different contexts (cf. Grube 1990:128). When this sign is used in numeric contexts as in Figure 36a, its logographic value is **JUN** and it writes the number one, *ju'n*. In name and title contexts, as in Figure 36b, this same glyph has a value of **'IX** “lady. woman.” It may also have the value **'IXIK**, for *ixik* “woman” when not in attributive position in name or title contexts as in Figures 36c and 36d. As can be seen in Figure 36c, it is sometimes accompanied by a **ki** syllable which clearly writes *ixik* in any case.

However, in practically identical non-

attributive circumstances, this same sign occurs without a following **ki** as shown in Figure 36d. It seems then that the **ki** sign is serving as a phonetic complement when it is present.

There is still some question as to whether this logogram may also have the value **NA'** with basically the same meaning as *ixik*, that is, as a word for “woman” although *na'* generally means “mother” in related languages (cf., for example, Keller and Luciano G. 1997:167 for Chontal; Pérez Martinez et al. 1996:150 for Ch'orti' as *nána*). Whether or

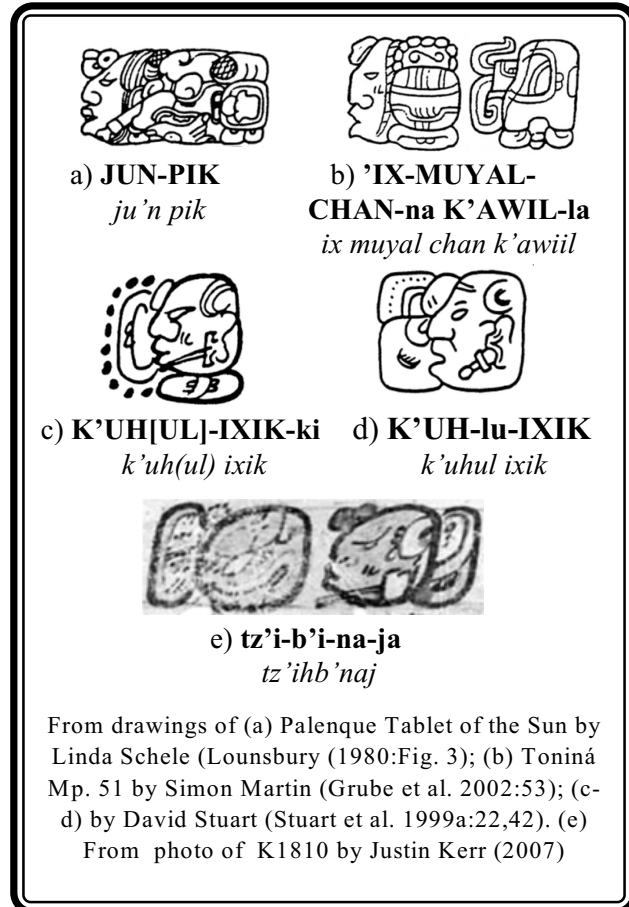


Figure 36. Polyvalent sign: T1000/T1002

not it does, it is certainly used as a syllabogram with the value **na**. It occurs frequently in the Primary Standard Sequence (PSS) on vases as in Figure 36e where it is often simply writing a part of a suffix on a passive of a derived transitive verb as suggested by Barbara MacLeod (1990:287-288). The verb *tz'ihb'(a)* is derived as a passive by *-n* which then also takes the thematic *-aj* suffix.

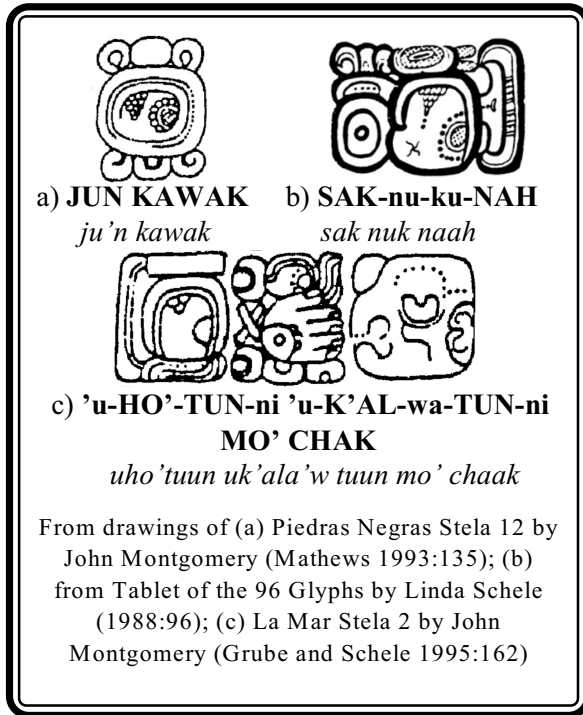


Figure 37. Polyvalent sign T528

Another very common polyvalent glyph, T528, is shown in Figure 37. It occurs in a cartouche as the day name KAWAK as shown in Figure 37a.

Outside of that context, it can be used as a syllabogram with the value **ku**. In Figure 37b, it is used along with **nu** to write the word *nuk* which in this context could be interpreted as “skin,” as suggested by Simon Martin (Miller and Martin 2004:23) (cf. Laughlin 1988:276 “wineskin”) or perhaps in this context “surface.” Alternatively it may be *nuk* “big” as in Ch’ol (Aulie and Aulie 1998:83). Thus *sak nuk naah* would

mean “white skin house” based upon its white walls or “white big house” based upon its size or importance. Important here is that T528 **ku** serves as a syllabogram **ku**.

This sign also serves as a logogram with the value **TUN** as seen in Figure 37c. In most cases, this logographic sign is usually easy to distinguish from its syllabic counterpart, even when out of context, because it is almost always accompanied by the syllabogram **ni** serving as a phonetic complement. That is also true in this case since it appears here with **ni** twice: **'u-HO'-TUN-ni 'u-K'AL-wa-TUN-ni MO' CHAK** *uho'tuun uk'alaw tun mo' chaak* “It was his five-stone, he wrapped (“tied”) the stone,

Mo' Chaak.” The meaning in these cases is basically “stone” although the period of time referred to is five 360-day years or one quarter of a score (*winikhaab*).³⁸ Although most logograms are not distinguished so clearly and consistently, the “stone markings” are so common in other logograms as well that **TUN-ni** probably serves as an example of a strategy that served to avoid misunderstandings and became a well-kept script tradition.

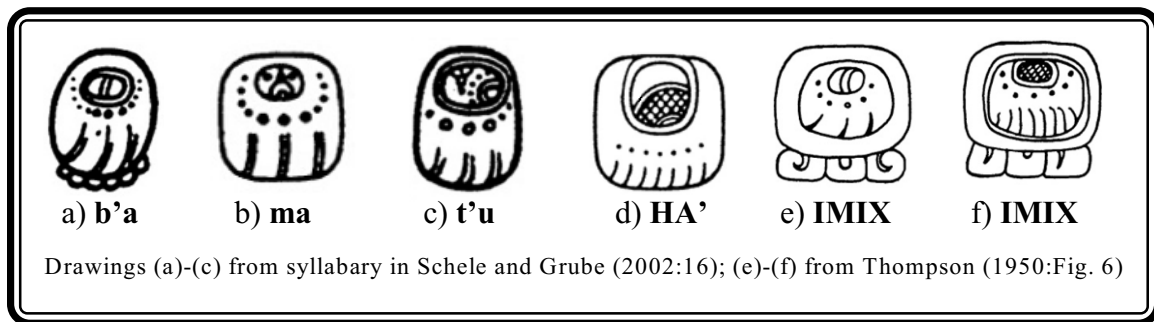


Figure 38. Carrier signs: “*Imix* glyph”

2.2.8.3.2 Carrier Glyphs: Same Basic Sign but with Noticeable Differences

We have already examined the T501 sign (Figure 38a), also known as the *Imix* glyph, which is used as the syllabogram **b’a**, when not in a day-sign cartouche. But the basic sign – sometimes with different T-numbers – can be used to represent several other values just by changing the content of the oval near the top. If the oval contains curved lines, usually but not necessarily two of them, its value is either **IMIX** as in Figure 38e or **b’a** as in Figure 38a. If it contains the outlines of a face similar to that which appears in the day sign **AJAW** (Figure 38b), its value is syllabic **ma**. If instead it contains the “stone” icon (Figure 38c) its value is **t’u**. Finally if the oval is filled in with black or, more commonly, cross-hatched lines as in Figure 38d, it is either a logogram with the value **HA’**, meaning “water” or, as in Figure 38f, a logogram for the day sign **IMIX**. Although it is not commonplace for such small variations in a sign to completely change its value, there are several signs besides this one for which this is the case.

³⁸Discussing the relationship between these stones as *tun* and the time-periods often referred to as “*tuns*” would take us far beyond what is relevant at this point.

Another “carrier” glyph that is capable of a variety of values depending upon minor variations depicts the head of a vulture (Figure 39). One version, listed as T747a and shown in Figure 39a, has the glyph used for the day sign **AJAW** next to its forehead. This is likely attached to a “scarf” or “headband” covering the top and back of the head. It is at times replaced by the head of the so-called “jester god” which itself is used in iconographic settings to symbolically indicate that the person wearing it is a ruler (cf. Schele and Miller 1986:53, 296-297). Since the jester god headdress or scarf can also be used with other glyphs to write **AJAW**, it has been called a semantic determinative (cf. Schele 1988:22-24), but

that would be using a term from other writing systems in a way that is only faintly reminiscent of its original meaning. Instead, it is the pictorial representation that is important here. Once one can otherwise demonstrate the reading of this glyph and other similar glyphs that have the value **AJAW**, it can be very useful to note that this headband is pictorially or iconographically indicative of rulership. But this identification relates to the value of this headband sign as well as the combined vulture-headband signs in basically the same way as does the pictorial content of all logograms.³⁹

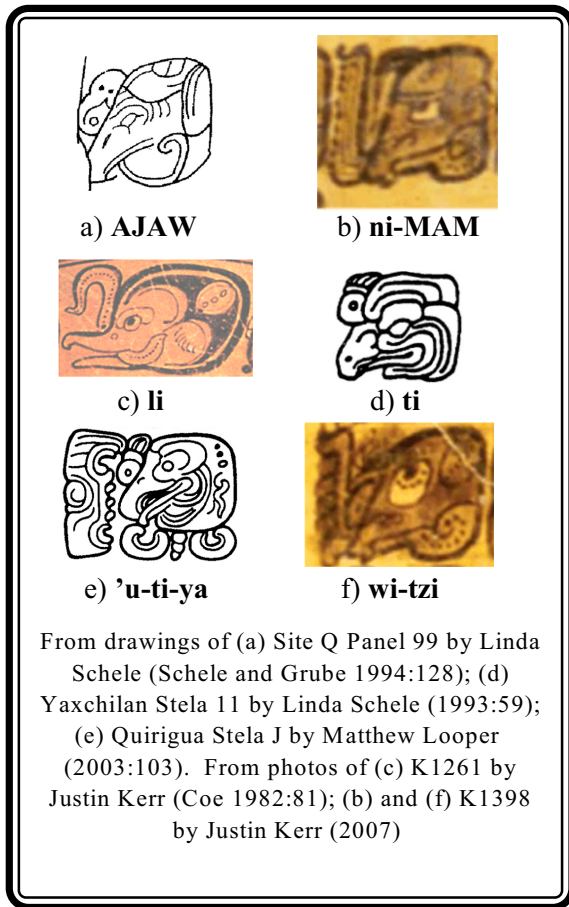


Figure 39. Carrier sign: “vulture”

³⁹That the headband is the determining factor in the recognition of this composite or carrier glyph is not the same as saying that it is a semantic determinative. A “determinative” is most often considered to be “A part of a logogram that indicates its semantic content”(Crystal 1987:419). Very few if any signs in
(continued...)

The role played by the vulture glyph here is similar to the **IMIX** glyph just discussed. What is infixed into the oval at the top of the **IMIX** glyphs in Figure 38 would not have the same value or connotation if it appeared alone. However, the **IMIX** glyph itself does not seem to add anything specific that would place the individual sign within a particular semantic category as do semantic determinatives. In this case, since the **AJAW** or Jester-God headband can appear on other head signs (for example, gopher and human), the vulture head also seems to play the role of “carrier.” But the headband alone in other contexts has a value other than **AJAW**, usually **HUN** for *hun* “paper” and by extension probably “paper headband.” So, although neither the vulture alone nor the headband alone has the value **AJAW**, the combination of the vulture head and the headband does. In this case, the pictorial content must include a band worn on a head in order for it to write *ajaw*. It almost always also includes the T533 sign that writes the day *ajaw* as well. The only real difference between the **IMIX** combinations and the vulture combinations here seems to be that there is at least one other head that can combine with the jester headband to produce the value **AJAW** while no other glyph has been found that could substitute for the **IMIX** glyph and its combinations.

The vulture head with a similar headband or scarf (Figure 39b) but without either the day sign “**AJAW**” glyph (T533) or the Jester God present has the value of **MAM** instead (cf. David Stuart pers. com.). Pictorially it is otherwise the same as can be seen in the illustration and does display a headband.

³⁹(...continued)

the Maya script fit that definition. One likely possibility suggested by some epigraphers, including Schele (Schele and Freidel 1990:52), is that of the cartouche in which day names appear. However, besides this example, unlike phonetic complements, semantic determinatives play little if any further role in the writing system. What is more, in late classic inscriptions, such as at Chichen Itza, and in the codices, day names were written without cartouches, likely without any loss of understanding. Thus context and the occasional addition of signs with the value **K’IN** seemed to adequately serve the same purpose. What is certain is that, other than these cartouches, there was indeed no systematic or widespread use of such determinatives.

Another very common value of the vulture head that may support its character as a carrier glyph is its service as a syllabogram with the value **li**. Its distinguishing mark is the presence of a wormlike object in its mouth as shown in Figure 39c.

Besides these two logograms and the syllabogram **li**, the vulture head is also used as a syllabogram with the value **ti**. As shown in Figure 39d, the sign that is otherwise the syllabogram **ti** (T59) when it occurs alone is attached to the forehead of the vulture. Because of this, it might be argued that T59 is serving as a phonetic complement for the vulture glyph which in turn represents the word **ti**. I believe this to be wrong for several reasons and would argue that the term “carrier glyph” for the vulture head in this case is more accurate.

First, as shown in Figure 39e, the vulture glyph can serve explicitly as a syllabogram with the value **ti** when writing a word other than the preposition **ti**. As the term is used generally and especially in the Maya writing context, syllabograms do not take phonetic complements. Instead, phonetic complements are used only with logograms. Also, logograms do not serve as syllabograms unless over time they have evolved into syllabograms by having a soft consonant dropped, usually the final one (see Section 2.2.8.5.1 for a discussion of this phenomenon). But when they do, they are also not amenable to complementation in those contexts. Therefore, the evidence shows that the vulture head is not a logogram here. Instead, I think it is better classified as a carrier glyph similar to the **IMIX** glyph just discussed.

Second, in the Tzeltalan and Ch’olan languages, the prepositions *ta* and *ti* do not end in a final glottal stop consonant. Indeed both *ta* and *ta’* in Tzotzil, Chontal, and Ch’orti’ (Laughlin 1988:305-306; Knowles 1984:461) as well as *ti* and *ti’* in Ch’ol (Hopkins and Josserand 1988f:t5-t6, Aulie and Aulie (1998:115, 117) are minimal pairs.⁴⁰ What is more, in idiomatic constructions that still use *ti* in Ch’orti’ such as *tichan* “above,

⁴⁰This is not necessarily true of the Yucatekan languages. Yucatekan sources such as Barrera Vásquez et al. (1980:788), Bricker et al. (1998:274-275), and Hofling and Tesucún (1997:593) list the preposition as **ti’** reflecting a CVC root. In Ch’ol, however, *ti’* is “lip, edge” while *ti* is “in, at, on, etc.” In Chontal *ta’* is “excrement” while *ta* is “in, at, on, etc.”

up,” *ti* is not even analyzed as a separate word. In the Colonial Acalan Chontal documents, *ta* is often joined to the name of the town as if it were a proclitic. In many cases, it still remains today as part of the town’s name even when not in the context of a sentence. The relevance of this for the **ti** vulture head is that the sign is basically a syllabogram and writes a CV syllable whether it serves separately as a preposition or as a syllable within another word. Since the preposition *ti* is a CV construction, it is fully encompassed by a CV syllabogram. As for *ti* in these languages, it may perhaps be better classified as a particle or a proclitic as some of the lexographers do (Kaufman and Norman 1984:139). Nevertheless, I prefer to classify it as a word based upon its actual meaning and function as a preposition.

Third, it is noteworthy that in the Classic texts, **ti** (T59) is only used in place of the logogram **TI’** (T128) to write *ti’* “mouth, edge” when it is followed by T679 (cf. Stuart et al.1999a:38). The two syllabograms **ti** + **I** combine to write *ti’*. The vulture glyph is never used alone to write *ti’* which might be expected if it were indeed a logogram with the value **TI’**.

Fourth, the vulture glyph can occur with a T59 glyph on its forehead without its having the value **ti**. This represents another value for the vulture head in its role as carrier. It occurs, for example, when the vulture head is preceded by **wi** and used to write the word *witz* which means “hill, mountain” as in Figure 39f. In this case, it has the syllabic value **tzi**.⁴¹ Critical for the analytical point is that the **ti** glyph on the vulture’s forehead can hardly be a phonetic complement here. Although the portion of the sign including the vulture head and T59 otherwise serves as the syllabogram **ti** and not as a logogram, the value **ti** would not be applicable in this case. It appears to be a T556 sign which otherwise is a logogram with the value **HA’**. Its significance in this context is

⁴¹The value **tzi** for this vulture sign was, as far as I know, first proposed by Nikolai Grube and Werner Nahm (1994:704) based upon its occurrence on another vase, K791, in *ux witz ajaw*, a likely reference to Caracol.

open to speculation, but it may have to do with the close relationship between mountains and water, at least in the sense of mists that are often present near them.

2.2.8.4 Signs Occurring in Partial and More Complete Forms

The organic, somewhat unpredictable nature of some aspects of the Maya writing system make it unlikely that any strictly systematic overall description will be able to encompass a justification for each of its permutations. It is clearly a system with elements that changed over time just as did the language that it was developed to write. This is also true of the group of signs that will be examined now.

One can glean from the texts that over time certain general reading order strategies were developed and generally followed. The reading order of the glyph blocks or collocations was generally from left to right and top to bottom in groups of two. Still, this writing order was followed only in a general way and usually only in longer texts. Many times this order was modified especially when the shape of the medium or the layout of the iconography demanded it. Sometimes, it is only the content of the text itself that finally allows one to determine which reading order is correct in a specific instance.

The order of the individual signs within a glyph block also follow a similar general pattern. The signs are usually meant to be read from left to right and from top to bottom. But it is not always clear in individual glyph blocks whether left to right or top to bottom has precedence. Sometimes even the borders of an individual glyph block are not completely clear. Often just a slight protrusion toward the left or toward the top of the block will make it easier to decide which sign to read next. Other times, the correct reading order of the signs, the order that makes grammatical and lexical sense, does not follow the usual rules.

Despite seeming out of normal sequence at first, there is one group of signs that allow the reader to safely predict the correct order even before relying solely upon grammatical and lexical judgement. This group involves signs that likely exist in two different forms. When they appear in their partial forms they often produce an

appearance of reading-order anomalies, but the reading order is influenced by what might be called a “stealth presence” of the complete form. This type of glyph was noted by Stuart and Houston (1994:21-22) in their work on place names. Once this is realized, the correct order for reading these signs becomes clear.

One of the most common examples of a sign that appears in a partial or full form, or, stated differently, that has part of its full form covered over by another glyph, is the AJAW glyph as shown in Figure 40a.⁴² It has the usual double-sign on top but below it here is another glyph with which it forms a unit. Then below that middle sign is the syllabogram **wa** serving as a phonetic complement. As a whole it can be transcribed as *ajawyan* “become ruler.” Figure 40b contains, in part, the same basic sign group that is read as *ajaw*. However, it appears here as part of an Emblem Glyph indicating the polity of which the referent was the ruler. It begins with the usual **K’UH(UL)** and the name of the polity **MAT** is superimposed, so to speak, over the center portion of what would otherwise be the full form of the

AJAW sign. In doing so, the AJAW sign superfix shows at the top and the **wa** phonetic complement can be seen at the bottom. The result is “*k’uhul mat ajaw*” “holy Palenque

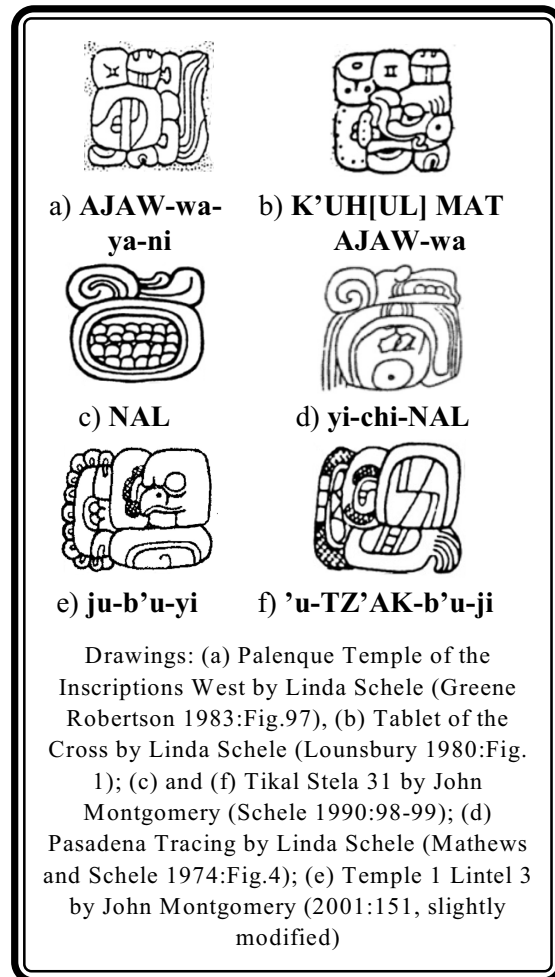


Figure 40. Signs occurring in partial and more-complete forms

⁴²See Nikolai Grube 2004c:5 for a more complete description of this phenomenon.

lord.” It is this arrangement of signs, from left to right and then from outer surface to inner, instead of top to bottom, that is the desired order.

Figure 40c is an example of the full form of the logogram **NAL**. It is likely that the bottom portion of the sign depicts an ear of corn with visible corn kernels, since *NAL* means “elate” or “ear of corn” in Ch’orti’, Ch’olti’, and Chontal.⁴³ The next entry in Figure 40d has the same portion of the **NAL** sign on top with the addition of what likely depicts corn silk flowing down each side of the signs below it. This example is especially complex. There are two signs that cover up the corn-kernel portion of the **NAL** sign. The first is the syllabogram **yi**. Then, infixed into the **yi** sign and taking up all but a continuous circular band around it is the syllabogram **chi**. The result, reading first the **yi** sign with the infixed **chi**, then the **chi** itself, and finally the bottom layer **NAL**, is **yi-chi-NAL** *yichnaal* “his/her front place.” Colloquially, this can also be translated into English as “with her/him” or perhaps “in the company of.”

The next example in Figure 40e is different from the other two in a couple of ways. First of all, **b’u** is a syllabogram and not a logogram as are the other two. Second, its outlines rarely expand to take up a whole glyph block. The head that is depicted in the full form is probably a bird *mut* and is likely meant to be the same animal as in the very similar **mu** sign which also occurs in a full or partial form. In other words, both **b’u** and **mu** are likely based upon the word *mut*. The formal graphic difference between the two signs are the nodules attached to the quarter or half circle extending out from the bird’s face.

What these two signs also share is the propensity for the circular portion which contains the bird head to be filled in or covered up by another sign. This situation occurs regularly with the full form of the **b’u** glyph and various inflected forms of the positional verb *tz’ak*. In the example shown in Figure 40f, the **TZ’AK** logogram completely covers

⁴³Chontal (Keller and Lucian G.:1997:106) has *ch’ocnā* meaning “elate” (“ear of corn”). Considering that elision of final // is endemic in Chontal, it is a match with Ch’olti’ *choenal* (Morán 1935c:45) and Ch’orti’*s* *ch’oknar* (Pérez Martínez et al. 1996:56; Wisdom 1950:722), both meaning “young ears of corn.”

up the bird. This makes it seem that the normal reading order produces ≠'u-b'u-TZ'AK-ji.⁴⁴ But this apparent order is caused simply by the TZ'AK logogram overlaying the bird head. Since the logogram TZ'AK overlays the b'u sign, it is on top in a way similar to the signs in the other two examples in Figure 40b and d. So the correct reading order is rather 'u-TZ'AK-b'u-ji with TZ'AK-b'u reflecting a transcription from upper to lower layer. It is to be transcribed as *utz'akb'uuj* and represents a derived positional transitive verb in the resultative aspect. Its meaning is “She/He put it in order/governed it,” or literally, “She/He was in the state of having put it in order.”

2.2.8.5 Historical Developments: Diachronic Variation in Value

This next set includes signs that are grouped together because they share a diachronic characteristic. In the earlier texts, they appear as logograms, often without phonetic complements. However, as time goes on, some begin to appear with syllabograms that are either phonetic complements or final syllables. Finally, some then occur from time-to-time as syllabograms themselves. Others occur in earlier texts in contexts in which they represent whole words and continue doing so, with only a few exceptions, even in later texts. Another characteristic that these signs share is a weak final consonant such as glottal stop /ʔ/, glottal /h/, or velar /j/. In some cases their interpretation as either a logogram or a syllable varies by time, location, or even scribe.

⁴⁴In order to avoid misunderstandings, impossible or unlikely transliterations, transcriptions, or reconstructions will be preceded by a not-equal sign: ≠.

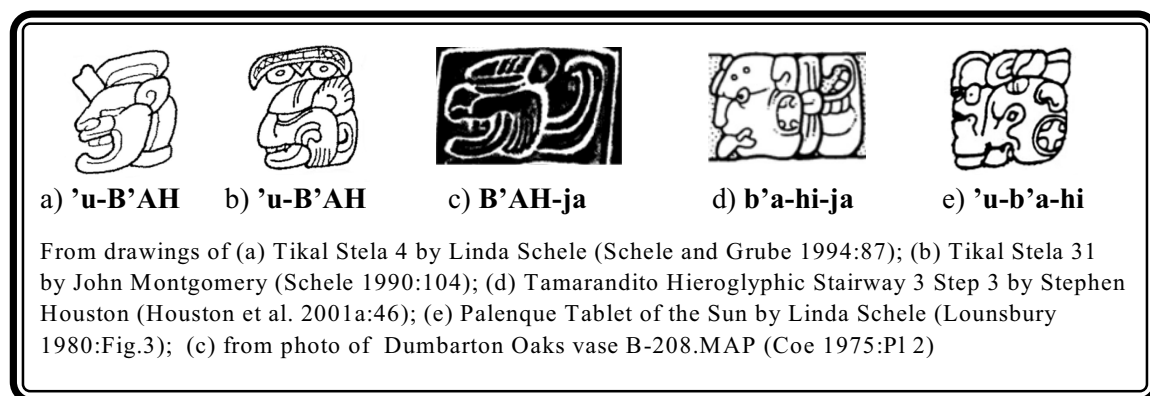


Figure 41. Logograms developing into syllabograms over time: **B'AH** > **b'a**

2.2.8.5.1 Logographic Signs Developing into Syllabograms

One of the most common examples that shows evidence of changes in sign interpretation over time and place is T757, **B'AH** or **b'a**. Figure 41a shows an early example. There is no **hi** sign used to signal a final /h/ on **'u-B'AH** *ub'aah* “it is his image/it is the image of . . .” It is also not used elsewhere at that time as a syllabogram to write other words, although syllabically written words are not very common anyway in these early texts. They start becoming more common by the time of the carving of Tikal Stela 31, but even on that monument, *b'aah* is written with a logogram as can be seen in Figure 41b. Another indication that T757 is a logogram at least in earlier inscriptions are examples such as that in Figure 41c where the logogram **B'AH** is followed by the syllabogram **ja**. In this case, *b'aah* is not possessed and so provides an example of an absolutive ending in *-aj*: **B'AH-ja** > *b'aahaj* (see Houston et al. 2001a:42-46). Compared with this, the much later example in Figure 41d of the unpossessed form is written as **'u-b'a-hi-ja** *ub'aahaj*. Considering the presence of **ji** in this case, it is likely that the Tamarandito scribe viewed T757 as a syllabogram and so called for the presence of **hi** to indicate the final consonant of the root.

Finally, Figure 41e, from Palenque's Tablet of the Sun, shows a very common pattern at that site. The word *b'aah* is most often written with T757 **B'AH** along with a

hi sign on top. It seems unlikely that this would be a phonetic complement since this is one of the most common signs and historically did not usually take a phonetic complement. More likely, this **hi** is added to go along with what is now interpreted as the syllable **b'a** to write *b'aah*.⁴⁵

2.2.8.5.2 Sign with Final Glottal Stop That Remained Primarily Logographic

The sign T87 **TE'** or **te** (Figure 42a) is a sign about which there is perhaps less agreement as to its classification as a logogram or a syllabogram. However, upon close examination, there seems to be little evidence for early use as a syllabogram. While some designate it as an early syllabogram (cf. Grube 1994:181), it seems that it occurs mainly in titles such as *kalo'mte'* (*kalo'm te'*) as in Figure 42b. This limited use continues in later

texts. It is used in another title as well *yajaw te'* or *yajawte'*. A common title at Yaxchilan is *kuy te'* or perhaps *te' kuy* since the order of the signs varies. While the meaning of these titles is still not certain, T87 seems to be used in a way that indicates it writes a separate word or enclitic and is not to be used, for example, to write *-et* or *-Vt*.

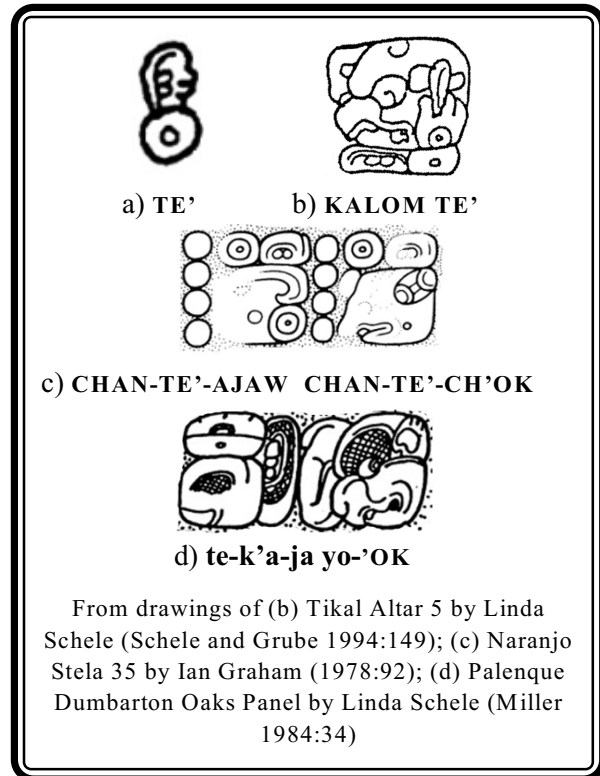


Figure 42. Logogram **TE'** and syllabogram **te**

⁴⁵Not addressed here is the use of T757 elsewhere without **hi** to write *b'aa(h)*. That is, the word may have come to be spoken without the final /h/ and so may have been written simply as *b'a* (or *b'aa*) without any need for a **hi** sign to write a final *-h*.

Whether or not there is a connection to the *kuy te'* title, *kuy te'* is listed in Ch'orti' as a type of owl, a screech owl. The word *te'* is widely used in the Ch'olan languages to mean “tree, wood, forest” and is also often combined with a name of a plant or animal to indicate that it is a forest or a wild plant or animal. For example *akmiyan te'* is listed by Wisdom (1950:448) as “pimiento (a wild tree)” and *yaxte'* is a “ceiba” tree (cf. Aulie and Aulie 1998:264). Sometimes *te'* simply indicates that an object is made of wood *aras te'* “wooden toy” (Wisdom 1950:453). It is also used as a numeral classifier, for example, with days of the 20-day months or when referring to more than one person or other being as in Figure 42c. Important in all these contexts, is that *te'* is a CVC root and is not being used as a syllable.

In the Classic-Period texts, a different syllabogram is used when a scribe clearly wishes to simply write the first syllable of a word, such as *tek'aj* “step, step on” which along with *ok* is an idiom meaning “to pace off, measure” as in Figure 42d. There seem, however, to be no clear cases in which T87 seems to be used as a syllable in similar circumstances. Only much later in late Post-Classic times, in the Madrid codex, is the word for tree using T87 written with two signs as **te-'e** (or **TE'-'e**) which may be an indication that T87 alone has now been reinterpreted as a syllabogram. The Yucatekan version of tree is written there as **che-'e** using T145. So in light of the parallel usage, it is possible that the Madrid scribe considered both T87 **te** (or **TE'**) and T145 **che** to be syllabograms. On the other hand, since T145 appears to be interpreted mainly as a syllabogram throughout the classic period, one could also simply interpret the **'e** sign as a phonetic complement. This interpretation would not be possible with **che-'e**.

Among the logograms that developed into syllabograms over time, the final consonants seem to be limited to glottal stop, glottal h, or velar j. However, among syllabograms as a whole, the final consonant of the pictorial source is quite varied. This seems to indicate a more specific selection of the original syllabograms for that group as compared to a less controlled, natural progression for this set.

2.2.8.5.3 Sign Interpreted as Either Logogram or Syllabogram

Having noted a few signs that apparently started as logograms and over time began to be used as syllabograms, this section will examine a few early syllabograms that, at least in some texts, seem to be used as logograms. T93 **ch'a** in Figure 43a is one example. It appears, for example, on the Tikal Marcador or “ball-court marker” indicating that the name of an underlord of *Siyaj K'ahk'* begins with the syllable *ch'a* as shown in Figure 43b. Since his name is represented by a logogram depicting an animal,

there are at least two possibilities. Its value may be **CH'ACH'** or **CH'AMAK**. The word *ch'ach'* in Ch'orti' means “gato de monte (a wild cat)” (Wisdom 1950:714; cf. Pérez Martinez et al. 1996:51). The word *ch'amak* means “coyote, fox” and “gato montez” in Colonial Yukatek (Bolles 2001:1255). It is not completely clear which animal is meant by “gato de monte” or “gato montez”. Kaufman's (2003:567-568) dictionary also reflects this ambiguity because the terms “gato de monte” and “coyote” often interchange as meanings in some of the languages although neither of the two

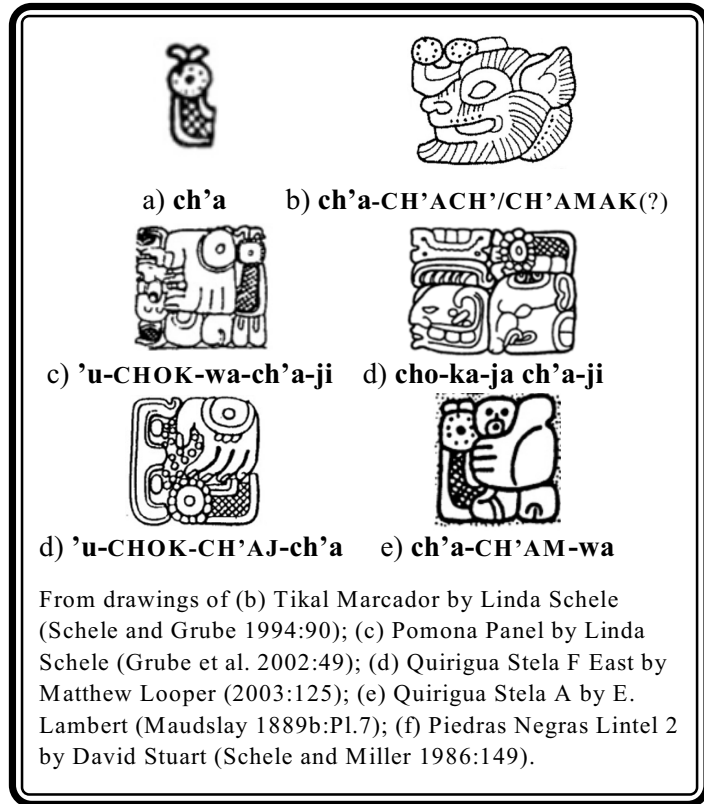


Figure 43. Syllabogram with limited sporadic status as a logogram or quasi-logogram

suggested values for this logogram are included.⁴⁶ Nora England (pers. com. 2007) notes that “gato de monte” means “fox” in Guatemalan Spanish and refers to Sandoval’s 1941 *Diccionario de guatemaltequismos*.⁴⁷ Nevertheless, whichever value is correct for the logogram, the appearance of T93, **ch’a** as a phonetic complement is strong evidence that it was an early syllabogram.

The most frequent occurrence of the syllabogram **ch’a** is with a **ji** syllabogram to write the word *ch’aaj*. It is often combined as a direct object with the verb *chok* “throw” as shown in Figure 43c to write *uchoko ’w ch’aaj* “he threw drops” or as the subject of a passive verb as shown in Figure 43d to write *chohkaj ch’aaj* “drops were thrown.” Because this ceremony is recounted with such frequency in the Classic texts, scribes became more likely over time at various places to leave the **ji** syllable off. It is this situation that has caused some to conclude that T93 may be a logogram. However, since its early appearance as a phonetic complement points toward its origins as a syllabogram, this phenomenon would likely have to be classified as the result of a historical development of limited scope based upon frequency of use rather than proof that it is instead generally to be classified as a logogram with a **ji** phonetic complement in most of its occurrences. There are versions of the whole phrase in which T93 **ch’a** does not appear at all but instead there are just drops coming down from the T710 hand that can serve as the logogram **CHOK**. It still includes in some cases the syllabogram **ji** which then serves as a phonetic complement for the drops logogram **CH’AJ** as can be seen in Figure 43e.⁴⁸

⁴⁶On the one hand, the pictorial representation itself seems to be more like a coyote or fox than a wildcat especially because of the extra fur showing at the back and bottom of the head. On the other hand, the nose or snout seems somewhat short for a coyote. It is also noteworthy that no spots are portrayed since what is usually termed “gato de monte” has spots. In later texts, the glyph used for **’OK** is quite certainly a coyote and *ok* matches the name for coyote in the Ch’olan languages.

⁴⁷England also notes that “gato de monte” is sometimes used for a type of wildcat in western Guatemala but adds that this usage may be due to Mexican influence.

⁴⁸In some cases it has been suggested that this **ji** syllabogram indicates instead a resultative (“stative” or “perfect”) suffix. I do not believe this is the case in the example shown or in many like it.

Although this is a theoretical possibility in some cases, it should be noted that this **ji** syllabogram occurs in
(continued...)

It is also important to note that T93 **ch’a** continues all along to be used as a syllable and even as a phonetic complement to write other words rather than just as a logogram, as in Figure 43f. This should be taken as evidence that, at most, T93 has become a quasi-logogram and depends even for this designation upon its use in writing one of the most commonly mentioned rituals in the Classic-Period texts.

2.2.8.5.4 Syllabogram with Late Quasi-Logographic Status

Another very common collocation on polychrome vases is the one that writes the word for their frequent content *kakaw* “cacao, cocoa.” It is written in various ways as shown in Figure 44. The example shown in Figure 44a is the most “complete,” with a combination of a double T25, read simply as *ka*, T738 **ka** and T130 **wa** for *kakaw*. The example in 44b includes diacritical marks, indicating the following syllable T738 **ka** should be read twice, and T130 **wa** for *kakaw*.⁴⁹ Next is Figure 44c which has only the combination T738 **ka** plus T130 **wa**.

Finally, the last example in Figure 44d includes only T738 **ka**.

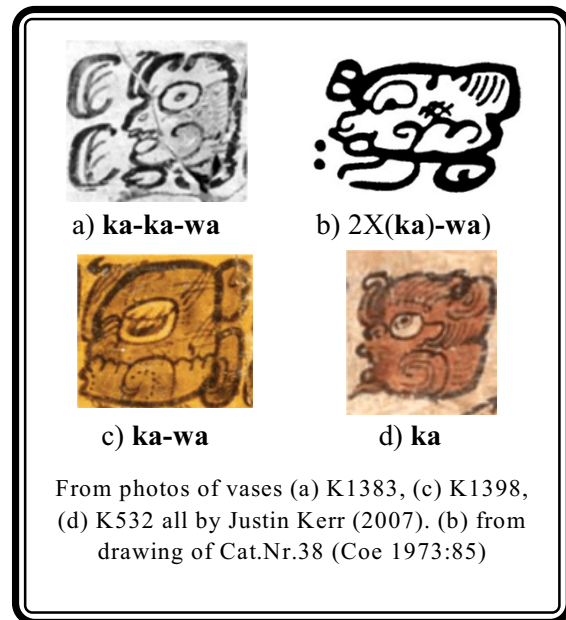


Figure 44. Quasi-logograms: syllabograms possibly reinterpreted as logograms

⁴⁸(...continued)

a similar way on both transitive and passive forms of the verb. It will be later argued that the *-VVj* form of the resultative suffix occurs only on transitive forms while intransitive verbs take an *-om* resultative suffix. Interpreting it instead as a short-hand way to write an extremely common verb-object combination provides an explanation that fits all of the occurrences whether on transitive or passive forms,

⁴⁹This feature, referred to sometimes as “diacritical marking” was first noted by David Stuart and Stephen Houston (1994:46).

Because of the large number of cases in which the diacritical marks are not present, as in Figure 44c, it has been suggested that the fish glyph T738 may be a logogram for cacao.⁵⁰ So one could interpret the fish or fish head as **KAKAW** with the **wa** providing the phonetic complement. In Figure 44a, both the **ka** and the **wa** would be complements. However, it seems that, at best, even the example in Figure 44d might only be considered a quasi-logogram. There is no evidence that a fish is otherwise connected with cacao except to provide the syllable **ka**. Nor could **ka** or **KAY** serve as a rebus for **KAKAW** since they are not homophones. The occurrence of the diacritical marks on many examples also provides evidence that the T738 is not a logogram. If it were, why would the scribes want it to be read twice?

One must keep in mind that the media, a vase instead of a carved monument, allows for a greater degree of freedom in writing *kakaw* without necessarily concluding that the scribe therefore viewed the glyph T738 **ka** itself as a logogram with the value **KAKAW**. Also, since the Primary Standard Sequence is somewhat formulaic, it is possible that the scribes allowed themselves a measure of freedom since the reader would surely be able to read the word correctly even though the word may not be completely spelled out. It may be a practice analogous to abbreviation common in writing even alphabetic languages as witnessed, for example, in many Spanish Colonial documents. Finally, if one wishes to nevertheless call T738 a late-blooming logogram, it is not likely that seeking the source in a relationship that exists between fish and cacao will be fruitful since it clearly rests upon the free usage of what is otherwise a syllabogram.

2.2.8.5.5 Syllabogram Infixed to Create Logogram with Localized Usage

More likely is the development over time of a logogram in the context of another very commonly reported event in the Classic texts, that of capturing a high ranking

⁵⁰ An alternative to this interpretation and indeed to the one that is being offered here has been suggested by Alfonso Lacadena (2004:184). He points to a possible alternative form of the word for “cacao,” that is, *kaw*, which would be written in these cases, thereby explaining the lack of the second **ka** syllable.

official of another state. In most texts, the verb appears in passive voice and is written using three syllabograms: **chu-ka-ja** an example of which is shown in Figure 45a using T512 as **chu**.⁵¹ Figure 45b from Chinikiha Throne 1 includes a sign shaped like **chu** but with so-called “stone markings” infixed. Around the time of this monument, late 7th century A. D., the practice of using the stone markings in the **chu** sign increased

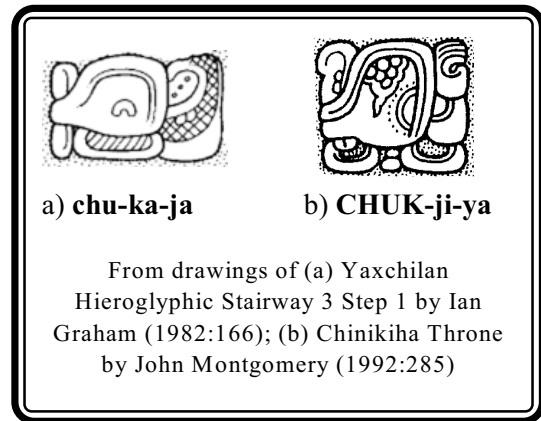


Figure 45. Logogram with localized usage created by infixation

in sites along and to the west of the Usumacinta River. This became more common around 9.15.0 .0. 0 (A.D. 731). This glyph with the infixed stone markings is often interpreted as **chu** plus the syllabogram **ku** which is often pictorially indistinguishable from the sign used for **TUN** which writes *tun* “stone,” although **TUN** is usually accompanied by the syllabogram **ni** as a phonetic complement. Some interpret this combination as one syllabogram infixed into another. However, infixing a syllable is a strategy more common with logograms than with other syllabograms. That makes its interpretation as the logogram **CHUK** more likely.⁵² What is certain it that the **ku** sign cannot be a phonetic complement here since syllabograms are really not amenable to them. It could possibly be considered as the conflation of two syllabic signs.

Looking back at one of the first known occurrences (Figure 45b), it is possible to reconstruct a plausible scenario as to why the **ku** was infixed and why it was likely used as a logogram. As will be explained in detail later, this particular word has an enclitic *-iiy*

⁵¹Note that Thompson mistook the part of both T512 and T532 sticking out to the left as an independent sign which he had otherwise classified as T87. Because of that, he did not include it in the drawings of either T512 or T532. When these two glyphs are being referred to in the text, it is assumed that this protrusion is included as part of these glyphs.

⁵²Although the stone markings in this case are likely to reflect the desired phonetic complement **ku**, it should be noted that these markings often do not indicate that at all. For example, the stone markings occur on **WITZ** “hill, mountain” logograms.

attached. Because of the length of a word and the stress being almost always placed upon the last syllable of a word, ellipsis often occurs. So what is normally the passive form **chu-ka-ja** *chuhkaj*, when the enclitic is attached becomes *chuhkjiy*. The /a/ of the thematic suffix is likely not pronounced, leaving just the /j/ to reflect it.

This is clearly a pattern that is reflected in the inflection of positional verbs even in the current languages. Positional roots are similar to adjectives in that they describe the position someone or something is in. For example, *chum* is an adjective meaning “seated.”⁵³ The other unusual characteristic of such verbs is that their inflectional suffixes in Classic Ch’olan *-laj* or *-waan* depending upon time and place (cf. Hruby and Child 2004) have the shape *-CVC* instead of the more common *-VC*. This immediately presents a problem for a system that uses CV syllabograms for both phonetic complements and syllabic spelling of words. When writing positional verbs with syllabograms such as **pa-ta-wa-ni** *patwaan* “be formed, made,” as in Figure 46a, the scribe assumes the reader will not take the **a** of **ta** to

be a part of the word that is to be read or pronounced. But there is also a problem when the scribe wishes to include a phonetic complement after a logogram, since that vowel is

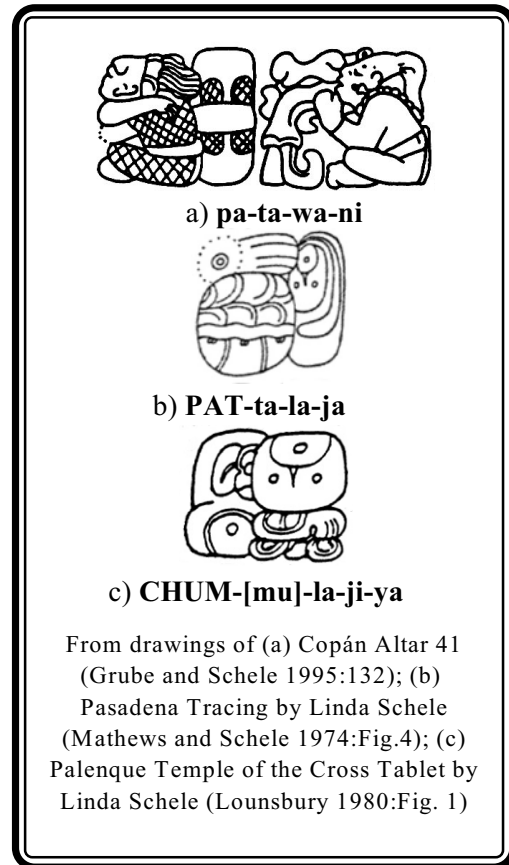


Figure 46. Spelling strategies when writing CVC suffixes for CVC roots

⁵³Note that in English the translation of such adjectives related to position takes the form of past participles. This is perhaps the closest one can come to an adequate translation of these verbs. The roots are not active verbs at all since they describe a position one is in. Translating them as active verbs, in this case “he/she sits/sat” would be quite misleading. It describes a position one is in, not the action one is taking. So “she/he is/was seated” more accurately reflects the meaning.

also not meant to be pronounced. This occurs with the same verb form *patwaan* when the **PAT** logogram is used as illustrated in Figure 46b. The complement **ta** is still simply added after **PAT** with the understanding that it is not to be taken as a part of the word (i.e. the root plus the inflection).

In some cases, a different clue is provided indicating that the vowel portion of the phonetic complement is not to be taken as part of the word form. When writing the word forms using the root *chum* “seated,” as, for example in Figure 46c, the phonetic complement is almost always infixed into the **CHUM** logogram. This is likely done for two reasons. First, it provides an indication that the vowel of the **mu** syllabogram is not meant to spell a phonetic part of the word. It is meant instead to call attention to the ending consonant of the root. Second, unlike the **PAT** logogram, the **CHUM** logogram is large enough for infixing to be easily accommodated.

I suggest that similar factors may be at work in the case of the T532 **CHUK** logogram shown in Figure 45b. Since the /a/ of *chuhkaj* is elided when the *-iiy* enclitic is attached, there is no reason for the vowel of the **ka** syllabogram to be present. As seen in the positional examples, it is okay to have a phonetic complement that repeats the root vowel between the root and a suffix, but employing a syllable with a different vowel implies that it has a special significance and should likely be sounded. But if one uses the **ku** syllabogram following another syllabogram, its vowel would have to be ignored in its reading or pronunciation. Although that is an option and one that is used in cases of positionals written syllabically, the open space of the T512 shaped **chu** glyph would easily allow for an infixed sign or for a conflation or combination of it and T528 **ku**. There may be some evidence for a scenario such as this, because its usage, at least early on, seems to be more regular on passive plus enclitic combinations of this verb. However, it also occurs at times on passives without the enclitic as well.

Unlike the other two examples of possible historical progression of syllabograms into logograms, this one seems to become a true logogram, albeit within a limited area. This usage provides another example of historical change in the Maya writing system. It

also suggests a cautionary note against attempting to provide an complete analysis of the whole system based upon a hypothetical original set of rules. While such rules are surely important and are usually in force, certain ad hoc needs seem to have created new signs and changed the patterns used to write old ones. Some of these, such as **CHUK**, seem to have attained at least localized or areal status as logograms. Others, such as **ka-wa** continue to be anomalies that, while perhaps reasonable, cannot without careful scrutiny, if at all, be considered central to the system as a whole. In the case of **ka-wa**, the context of the medium involved, that is ceramics, may have also influenced such developments. This also suggests that not every example of a glyphic form or glyphic word combination should be used a priori to alter one's interpretation of a specific glyphic construction, much less one's overall conception of the conventions governing the writing system.

2.2.8.6 Glyphic Abbreviation and Ellipsis

The term "ellipsis" has technical meanings in phonology and grammar. I am using the term here in a somewhat different sense, similar to that defined by the *American Heritage Dictionary* (Pickett et al. 2000): "The omission of a word or phrase necessary for a complete syntactical construction but not necessary for understanding." This is similar to abbreviation except that abbreviation in alphabetical languages takes place on the level of letters instead of words or phrases. But instead of applying it directly to words, phrases, or letters, I am referring to the presence or absence of signs used to write words and phrases. In these cases, it does not seem that the parts of words or phrases themselves are meant to be dropped but that the context, shared knowledge, and frequent repetition allows the scribe to reduce the number of signs used to write those words and phrases. At the level of both words and meaning, there is no abbreviation or ellipsis intended or proffered. At the level of the script, glyphic signs are sometimes left out to the extent that scribes wish or dare to, betting on the readers' background knowledge to fill in the gaps. Of all places that such a gambit has a likely chance of success, the names of rulers stand at or near the top. The readers, mostly elite members of the ruler's

kingdom, their heirs, and allies from other kingdoms, probably form the main audience and require only partial spellings – analogous to abbreviations – to immediately recognize well-known names that are being written.

2.2.8.6.1 Abbreviation and Ellipsis: Name of *Yax Pahsaj Chan Yopaat*

One of the most perplexing examples of this type of abbreviation and ellipsis involves the name of one of the most well-known rulers of Copán. The first part of his name has been correctly read for some time as *Yax Pahsaj*. Examples of this part of his name can be seen in Figure 47. As can be seen, three different forms of this part of his name are shown. The first in Figure 47a, is the most explicit rendition, in that all of its parts are spelled out **YAX-pa-sa-ja**. In the second, Figure 47b, **YAX-pa-sa** are present. Finally in the third example, Figure 47c, this part of the name is written with two logograms **YAX-PAS**. Since the word *pa(h)saj* likely represents a passive derived from the transitive verb *pas*, one could argue that the logogram **PAS** itself contains the required *-aj* thematic suffix. I

would argue that this analysis is wrong. Perhaps the strongest argument against it in this case is that such shortening or abbreviation is employed not only in the logographic version of the word but also in the syllabic version. So one would have to argue that syllabograms also incorporate grammatical suffixes without specifically writing them. That does not seem likely and misses the legitimate point being made here. That point is

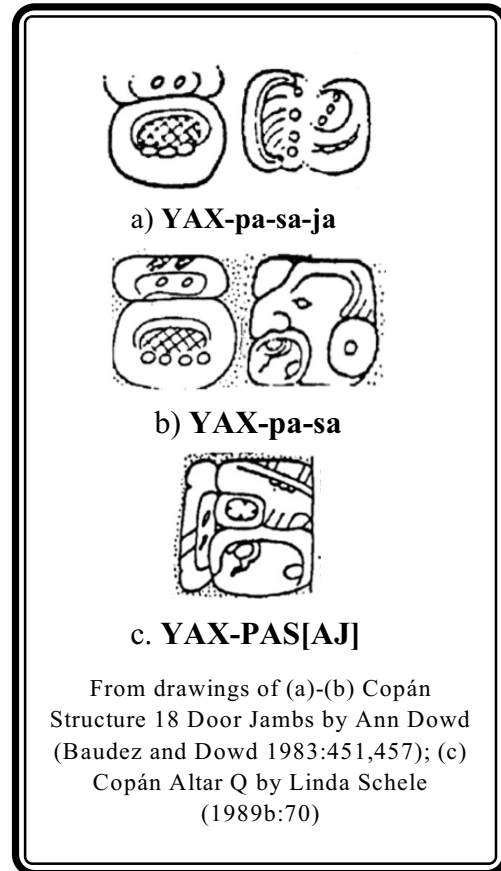


Figure 47. Variation in the first part of the name of *Yax Pahsaj*.

not that logograms and syllabograms encapsulate grammatical suffixes they actually do not write. Instead, the proposal is that, in specific and well-circumscribed instances such as names, scribes can shorten what they explicitly write. In doing so, they depend upon the capability of the reader to easily fill in what they did not explicitly write. In the examples provided here, they expect the reader to immediately comprehend the words *yax pabsaj* based upon the portions that are written. This is similar to writing Mr. in English and knowing that the reader will comprehend “mister.” An even closer analogy is writing M.^a in a Spanish name knowing that the reader will read “Maria.” The letter “a” or even “M” and “a” should not therefore be analyzed as encapsulating the actual name word Maria in every possible context. Instead, in certain controlled contexts in the written Spanish language, the abbreviation M.^a can be used to write “Maria.” That is what has sometimes happened in Classic-Period texts when the name *Yax Pabsaj* and several others have been written. The ways the names have been shortened differ from text to text and from place to place.⁵⁴

The last part of this same ruler’s name has only been adequately deciphered more recently by David Stuart (cf., for example, Glassman 2001). In a commentary upon that

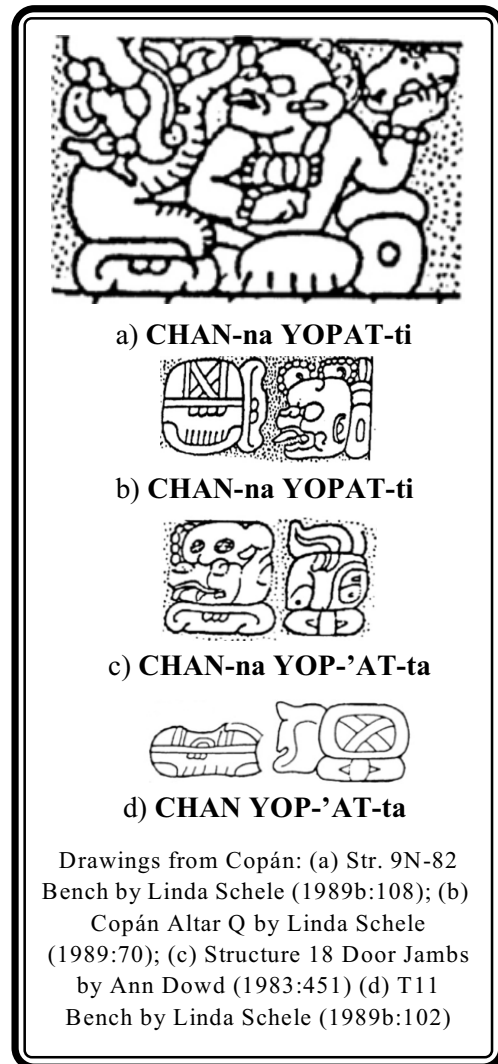


Figure 48. Variants of *Yopaat* appearing in *Yax Pabsaj*’s full name

⁵⁴Of course, there are some contexts other than the writing of names in both these modern and ancient writing systems in which similar strategies are practiced.

name, Marc Zender (2001:78) explains that this portion of the ruler's name is that of an ancient god, *Yopaat*. This god is depicted in full figured glyphic form in Figure 48a as carved on the Sepulturas bench. Some of the other forms of this part of the ruler's name are shown in Figure 48b-d.

There are several anomalies present in these and other instances of his name that require further explanation. Following **CHAN**, represented either by the "sky" or the "snake" sign, Many of the versions begin with what is otherwise almost always the syllabogram **yo**. We have already noted in Section 2.2.7.5.7 above that what this syllabogram depicts is a leaf and that the word for "leaf" in Ch'olan and Yukatekan is *yop*. So, although it is not usual that a syllabogram is also used as a logogram, we have already seen several examples where this happens (see Section 2.2.8.5 above). Such exceptions are more likely to occur in very contextualized circumstances such as a person's name. In the context of the name *Yopaat*, T115 is viewed in this context as a logogram **YOP**. This usage exemplifies both the flexibility that is possible in the system and also the importance of context in determining when such variation can take place without endangering readability. It would be a mistake to generalize from this instance that all syllabograms can and are also freely used at any time as logograms based upon their original lexical origin. Instead, such occurrences should be viewed as contextually dependent exceptions.

Another misleading part of some **YOPAT** versions is a sign that resembles a syllabogram with the value **to** (T44). Instead of writing that syllable here, it seems instead to indicate that *yopaat* is the intended value. This is corroborated by its presence on the so-called full-figured version of the name as shown in Figure 48a. It can be seen on the head of the figure on the right. Although the combination of it and other signs certainly writes the god name *Yopaat* in these and similar contexts, the T44 signs are also present in full-figure versions of other god names. Just who the god *yopaat* is and what his characteristics are requires further investigation.

More important for the present purposes is to note how these spellings reinforce some points that have already been made. One is that the interchange of the signs used to write *chan* illustrates that the emphasis in writing is on the word *chan* and not on the pictorial content of the logogram. It is not writing “sky” in one place and “snake” in another. The context here indicates “sky,” no matter whether the logogram depicts a snake or an iconic sky being. Whether or not there is a cultural connection between snakes and the sky is a separate issue. That the name incorporates a passive form of the verb “open” sometimes used in the context of dawn, indicates that what is written refers to the “sky.” Puns and plays on words may at times be involved but that too is a separate issue.

There is another issue raised here. Although the last part of the ruler’s name has been transcribed here as *yopaat* indicating a long vowel in the last syllable, the presence of both **ti** and **ta** indicate that it could also have been written and read as *yopat* by many. That is why it is not only legitimate but important to transliterate the text without applying any transcription rules to which one may subscribe. Since the same logograms could be used for different words, these rules are best applied in the second step, the transcription. **YOPAT** carries both **ti** and **ta** phonetic complements. So even for those who vigorously subscribe to “disharmony” rules, whether the signs are all syllabic, all logographic, or a mixture of both, the transliteration would be neutral as to length. It is not indicated by the scribe in writing the stem, only in indicators located in a phonetic complement or in the final syllable.

2.2.8.6.2 Abbreviation and Ellipsis: Name of *Yukno’m Ch’en*

Figure 49 shows different versions of another ruler’s name that appears at several different sites. This name, *Yukno’m Ch’e’n*, is shared by two different rulers of Calakmul, the second of which ruled from 636 to 686. The first part of his name is also shared by four other rulers. The last part of this name, *ch’e’n* “valley, dip, cliff, hole, cave,” does not vary too much, usually consisting of the logogram **CH’E’N** followed by

the syllabogram **na**. The first part, which is written syllabically but often not completely, is *yukno'm*. Out of context, this construction is an antipassive resultative (see Section 5.2.4.5 below) or an agentive in *-o'm*, which we will argue later, is based upon intransitive resultatives. Taken on its own, it could mean either “he/she/it shakes” or “he/she/it is the shaker.” Along with *ch'e'n*, it means something like “he/she/it cliff shakes” or “he is the cliff shaker” or simply “Cliff Shaker.”

For our purposes here, it is interesting again, that although it is written syllabically, parts of the verb or agentive are often left out. So it is not possible to correctly conclude that the missing parts are subsumed within a

logogram. The examples of the first part of the name are written as (a) **yu-ku**, (b) **yu-ku-no**, and finally (c) **yu-ku-no-ma**. It is also interesting that the portion of the **no** syllabogram, as written, is quite indistinguishable from some forms of the syllabogram **ji**. This is all evidence that points to precisely the same conclusion as reached from the previous example. When well-known, often-used words and phrases are written, especially in contexts such as names and titles, scribes make different choices as to how explicitly each part of the name must be written. Often, when they decide that the context will make the desired reading clear, and to the extent that they think it will be clear, they feel free to leave out portions of the name or title. Postulating that the scribes began viewing these groups of syllables as logograms is also not a convincing hypothesis, especially since the syllabograms used vary from text to text. Instead, as in most writing systems, the overall goal is for the reader to be able to understand what is written. If that

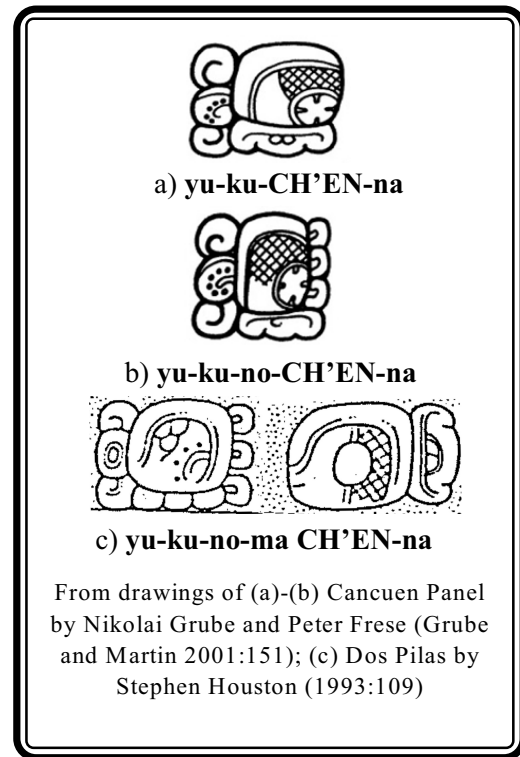


Figure 49. Variation in writing the name of *Yukno'm Ch'e'n*.

can be accomplished without writing every sign normally required and if it can still be easily read when abbreviated, this goal is still achieved.

2.2.8.6.3 Shortening or Ellipsis Likely Phonetically Influenced

The incidences of shortening and ellipsis that have been addressed up to now are based on and limited to the written language itself. In other words, while not all the elements of the words and phrases may be written in such examples, the words that are to be sounded or understood are themselves not shortened or abbreviated. Just as an abbreviation such as Mrs. is meant to be read as “mistress” or “missus” and not as “murrs,” so too were they meant to be read as whole words, phrases, or sentences. But there seem to be some words shortened in the Maya texts for reasons that may be based rather in the spoken language itself. Many of these examples have been noticed and identified as such for some time (cf. Schele 1991a:45-46).

Figure 50a shows the word *itz'iin* “younger brother” written with three syllabograms: **'i-tz'i-na**. But when the word *itz'iin* is followed by *winik* as in Figure 50b-c, a word that begins with a /w/

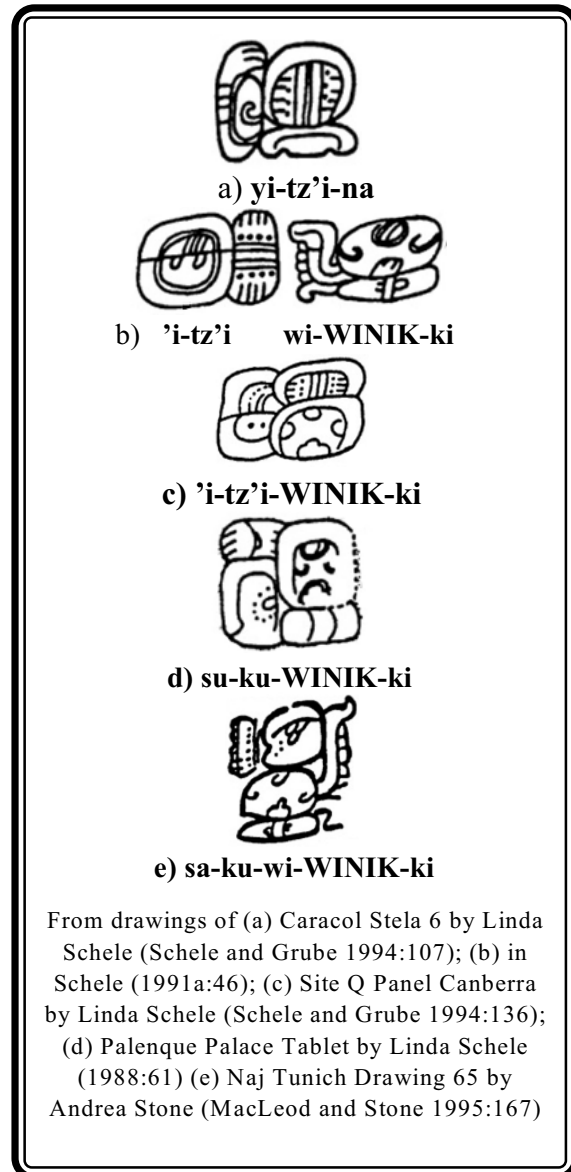


Figure 50. Elision that is likely phonetically influenced by the contextual environment.

sound, the syllabogram **na** never appears. This also occurs when the word for “older brother” *sukun* or *sakun* appears preceding the word *winik* as shown in Figure 50d-e. It seems likely that this represents a phonetic representation driven by actual speech rather than a writing practice driven by separate tendencies to shorten or abbreviate words in a particular context. The difficulty of shifting from an /n/ sound to a /w/ sound in speech makes this hypothesis the most reasonable barring strong evidence to the contrary.

A related question is whether even the final **i** of **'i-tz'i** is meant to be used actively as part of the word. Stated differently, was even the final /i/ of *itz'ii* elided in speech when it was followed by *winik*? This question is difficult to answer because, of course, the final syllabogram in such cases is **tz'i** and so the **i** is always present, quite unlike the missing final **n**. Because of this difficulty, it is perhaps best to err on the side of caution and suggest that the vowel of the second syllable in each of these combinations is also meant to be sounded. If so, one would be left with *itz'ii winik* and *suku winik* rather than **itz' winik* or **suk winik*. A minor piece of evidence in favor of this transcription is that these two relationship words are usually combined into one glyph block with **WINIK**, making it easier for the reader to retain the final vowel in practice.

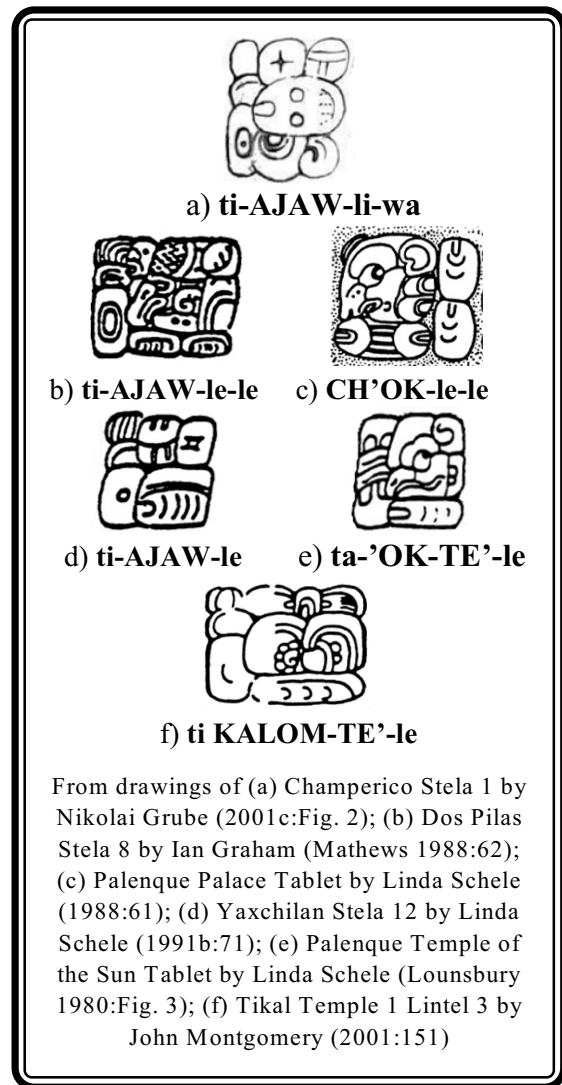


Figure 51. Ellipsis in a well-attested abstractive suffix

Another set of words that many epigraphers believe exhibits a type of shortening are certain titles that often take a *-lel* suffix when referring to the office itself.⁵⁵ More accurately, this is an *-el* suffix that is attached to a stem with an existing *-l* suffix. That this suffix is likely *-il* is attested by several examples including the one shown in Figure 51a *ti ajawil*. The compound suffix *-lel* itself occurs as such several times in the Classic-Period texts on the root *ajaw* that has the meaning “lord” or “king.” An example of this is shown in Figure 51b *ti ajawlel*.

Because of the occurrence of a dozen examples of *ahaulel* (*ajawlel*) in the Colonial-Period Acalan Chontal document, most used in the same or very similar contexts, it can be directly compared with its usage in the Classic-Period texts. Smailus (1975:206-207) notes that the suffix *-il* is used in Acalan Chontal to derive generalized or abstractive nouns from other nouns. Then the suffix *-el* is added to provide further abstraction: “corresponde a los sufijos castellanos” ‘-dad, -ía, -encia,’ etcétera. . . . *ahaulel* “señorío” so “lordship” or, more colloquially “reign as king”

This compound suffix also appears in its full form with the title *ch’ok* to produce *ch’oklel* as shown in Figure 51c. Although not shown in the figure, it is preceded in context by *chumwaan ta b’aah* “he [*K’an Joy Chitam*] was seated as the primary offspring (“youth”),” meaning, of course, that he was next in line to the throne currently held by his brother.

In both Classic Ch’olan and in Acalan Chontal the /i/ of the first suffix is elided resulting in the compound suffix *-lel*. Knowles (1984:182-184) reports exactly the same combination of suffixes for Modern Chontal. What is of special interest in this context is that she also attests further elision without any change in the usage or meaning of the suffix. In both the case of the *-il* suffix and the *-el* suffix, the *-l*, when final, is elided. On the contrary, when the two suffixes are combined, the *i* of *-il* is elided leaving the *-l*.

⁵⁵According to Schele (1991a:41) this was first proposed by Peter Mathews.

However, the final *l* of the *-el* suffix is elided, leaving simply *-le* as the compound suffix. Thus she lists *'iš-ik-l-e* and translates it as “women in general, womanhood.”

It is precisely this pattern which occurs most often in Classic Ch'olan as well, not only as *ajawle* and *okte'le* but also as *kalo'mte'le* as well, as can be seen in Figure 51d-f. The meaning and usage of the suffix *-le*, since it is simply a shortened version of *-lel*, is identical to it. It is more than likely that these shortened or elided versions derive from the way these words were most often pronounced in actual conversation. That makes this type of elision something quite different from the abbreviation and shortening observed in the names of well-known elites. In those cases, there is likely no intention of changing how one might pronounce the names. In these cases, the intent is likely to write what one normally heard. Linguistically, the shortening in the case of *-le* suffix from *-lel* to *-lel* and finally to *-le* was likely occasioned by the length of the expanded lexemes and the tendency to elide certain consonants such as /l/ in word-final position.

In support of phonetic causes of ellipsis for both of these last two types of lexemes ending in *-Vn* and *-lel* prior to elision, it should be noted that it is always the last *n* or *l* that is left off just as is likely in normal speech. It is also true that sounds such as /l/ and /n/ may be more susceptible to such elision especially in the specific phonetic and lexical environments in which such elisions occur. By comparison, the elision that often occurs in names is not as regular or consistent. For example, not always the same glyphs are elided and the elision occurs despite the lack of change in context. That is why the term “abbreviation” is more appropriate to them.

2.2.8.7 Specific Meaning of Word Written with Logogram Differs from Item Depicted

As in every language, there are many words that acquire specific meanings, or perhaps more accurately from a synchronic standpoint, have meanings and connotations that fit only in specific contexts. Since the distinction between these meanings comes at a level deeper than the particular phonetic word itself, the same logogram can be used to

write these different words. So one cannot know what the precise meaning is until the word itself is considered in context. It is the context and not just the word alone and surely not the logogram itself that allows one to discover the precise meaning in these cases. This should not be surprising since most written communication and indeed all communication is made easier and more understandable through context.⁵⁶

2.2.8.7.1 Meanings Etymologically Related but Noticeably Different

A common logogram in classic texts, one that appears often both on carved monuments and painted ceramics, is T539 **WAY**, an example of which is shown in Figure 52a.⁵⁷ One of the basic meanings of *way* in the Tzeltalan and Ch'olan languages is as a verb “sleep”⁵⁸ In other forms, such as with an instrumental suffix *-ib'*, as *wayin'* (Figure 52b), it means “bed” and “place to sleep, bedroom.” When that instrumental is possessed, it takes an additional suffix *-il* becoming *wayb'il* as seen in Figure 52c. In contrast with *wayb'il*, when *way* is possessed, as in Figure 52a, no *-il* suffix is needed, nor does one occur.

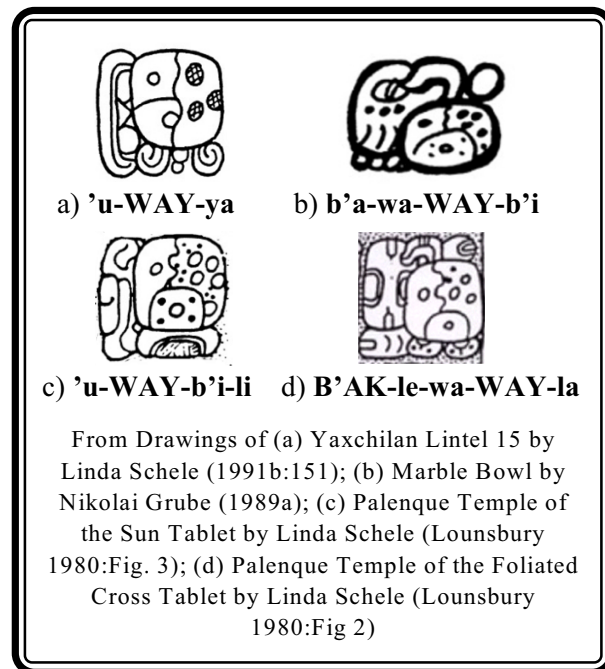


Figure 52. Logograms used to write different etymologically related words: **WAY**

⁵⁶The lack of sufficient context for understanding and word selection is, in fact, one of the main reasons why translations performed by computer software are still so inaccurate even after almost a half century of intense development.

⁵⁷Decipherments of this logogram were made independently by several epigraphers within a short period of time in 1989 by Grube (1989a; 1989c) and Houston and Stuart (1989).

⁵⁸See, for example, Laughlin (1988:326) for Colonial Tzotzil; Slocum et al. (1999:139) for Bachajón Tzeltal; Hopkins and Josserand (1988f:w-1) for Ch'ol; Wisdom (1950:752-753) for Ch'orti'; and Knowles (1984:477) for Chontal.

In various forms, the word *way* is also a verb meaning “to dream.” Still, the source of its pictorial form, with half a clear “**AJAW**” face on the left and a spotted one on the right, has another meaning, that of an animal other or spirit in the iconographic form of a jaguar. Therefore, *way* is also a word for this other being to which a person is linked and into which, in certain circumstances, a person and especially a shaman may be able to change. Later in the Aztec area, this being was called his “*nagual*.” Finally, *way* can also refer to a shaman, for example, in Colonial Yukatek (Barrera Vasquez et al. 1980:916) or Colonial Tzotzil (Laughlin 1988:326), as it likely does in Figure 52d. If so, the Palenque ruler *Kaw B’ahlam* may have also had the title of *b’akel way* “bone (or Palenque) shaman.”

All of these forms based upon *way* are present in the Classic Period texts and the logogram **WAY** shown in Figure 52a is used in writing them. Since all of these words are derived from or based upon the same word root, they cannot really be classified as rebuses. They do not just sound the same, but are actually related etymologically. Still, the meanings and connotations are disparate enough that misunderstandings could easily arise if not interpreted correctly. Just because the logogram depicts a half human, half animal visage, does not mean that all the words written with it refer specifically to this animal other or to a change from human to animal other. Important from the perspective of the analysis here is that, just as with all logograms, one must recognize the word or word root that is being written with the logogram, in this case *way*, and then read it along with any possible syllabic affixes that might accompany it. This logogram often includes phonetic complements accompanying it to make that first job easier. In the case of this particular logogram, it became the common practice to include the phonetic complements most of the time, making its recognition as **WAY** even easier. The accompanying clitics and suffixes written with syllabograms such as *u-*, *-ib’*, *-il*, *-al* and others, are read either before or after the root as appropriate and usually in order left to right and top to bottom to arrive at *uwayib’*, *uwayb’il*, *wayal*, and more.

The affixes help inform the reader concerning the shape of word to be read. Then, it is both the whole word, including affixes and attachments, in conjunction with the further context that informs the reader concerning the correct meaning from “animal companion,” to “sleep,” to “dream,” to “bedroom.” This latter process is essentially the same as that experienced in hearing speech.⁵⁹ It is when one arrives at the word level, rather than remaining at the glyph or sign level, that understanding the written word takes place.

Logograms such as this one are not really rebuses. The words they write are all related at the level of etymology, derivation, and general meaning. However, the specific meanings are different enough that one must still go beyond the sign level to the word level to comprehend the meaning, just as one must go beyond the alphabetic sign level in alphabetic systems. If one remained at the even more basic pictorial level – in this case at the iconic depiction of a half-human, half-jaguar face – one would have difficulty choosing the right connotation even if one were acquainted with the culture of the person who produced the text. Instead, one likely settles upon the meaning of “sleep,” “dream,” “bed,” “bedroom,” or “animal (or “plant” or “god”) companion” based upon the whole lexeme, the whole sentence, the whole passage or text, and even upon the non-linguistic context. That is what is meant here with the contention that logograms do not have meaning in themselves, but rather write, alone or with other signs, words and sentences that do have meaning. The actual signs are to be used at the surface level in a writing system, and are not normally meant to be taken as a separate system of meaning independent of the words they write. Instead, they serve in the first instance as tools to

⁵⁹Of course, there are differences, but they are not relevant for this argument. A speaker may put emphasis on a word in various ways not possible in writing and, if the conversation takes place in person, gestures and body language may also play a part. In the written language, there may be different spellings for words that are pronounced the same, such as “to,” “two,” and “too” in English, or punctuation marks which may help avoid misunderstandings. Many of the Classic Ch’olan inscriptions are accompanied by depictions of persons performing specific activities which helps to provide context. Sometimes this is enhanced by pointers such as feathers and other items that point to the names or titles of those depicted (cf. Bassie-Sweet 1991; Wald 1997b).

write words and sentences, and the words and sentences serve as tools to convey meaning.

2.2.8.7.2 Meanings Not Etymologically Related: “Rebuses”

If signs that write words or word roots with a range of related meanings imply that they write words rather than have meanings, so called “rebus” writing makes it explicit. The term “rebus writing” or “rebus sign” has been applied by several researchers over a long period of time, for example, by Cyrus Thomas in the nineteenth century (1888:368) and by J. Eric S. Thompson (1950:46-48) as noted earlier. In general, this term was applied by epigraphers to logograms that depict one thing but actually write another of phonetically similar or identical shape. Because of the pictorial nature of the signs used in the script, many of them can be viewed theoretically as rebuses. Whether they can or not, does not depend upon the signs themselves, but rather upon whether the words they write have etymologically unrelated homonyms in the language.

Epigraphers tend to call only those signs “rebuses” that have already been established through context as pointing to homonyms. Because of that, the list of rebuses could theoretically be enlarged at any time through reinterpretation of already known texts or discovery of new ones. Rebus logograms are extremely important for the overall argument concerning meaning because the referent of the word they write is not what is actually depicted.

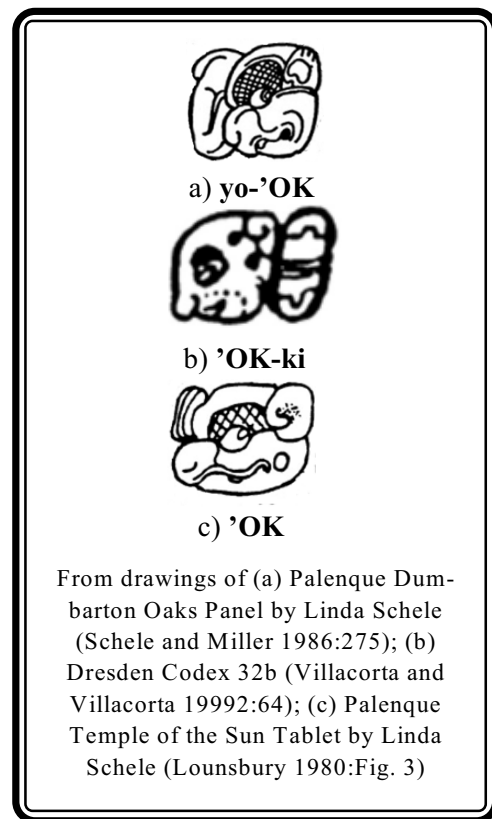


Figure 53. Logogram writing homonym of word referring to depicted content: ’OK

So these logograms clearly do not “mean” what they depict. Instead, they are used to write a word that means something other than what is actually depicted. The use of rebuses in this sense demonstrates that readers cannot rely on the pictorial content of a logogram but rather must rely primarily upon the shape of the word or word root that a logogram is used to write.

Logograms depicting animals seem to be a fertile source of rebuses. One that is used often as a day name and also in other contexts is T765b **'OK** (Figure 53a-c.). It is not immediately clear from its appearance as to just what animal is depicted. Thompson (1950:78) avers “dog” because the day name in several Mayan languages is *tz'i*, which means “dog.” The comparable day name is also “dog,” *itzcuintli*, in Central Mexican Nahuatl. Perhaps the most important clue as to its pictorial identity comes from the Mayan languages of the highland area adjacent to that inhabited by the Classic Maya. In Q'anjob'al and Popti' (Jakaltek), *'oq* is the word for “coyote.” In Chuj it is *okes* (cf. Kaufman 2003:597). Although Tzotzil (Laughlin 1975:67;1988:152) and Tzeltal (Slocum et al.1999:88) use *ok'il* for “coyote,” that word may come from *ok'* “to cry,” which is reconstructed as Proto-Mayan **'o'q'* instead of **'o'q* for “coyote” (Kaufman 2003:740). As noted by Thompson (1950:78), Marcos Becerra (1935) has *oc* meaning “dog” for Palenque Ch'ol, but he did not mark glottalized consonants. Nevertheless, the existence of *ok* “coyote” in the Q'anjob'alan family is likely enough to warrant accepting it. The resemblance of some breeds of dogs to coyotes is probably enough to bridge the gap between them.

Otherwise, *ok*, means “leg, foot, pole” in all the Ch'olan languages. In the Classic inscriptions (Figure 53a) and in the Dresden Codex (Figure 53b) the logogram **'OK** is used when “leg, foot” is meant. It is also employed in writing a title or office held by youths, especially at Palenque as shown in Figure 53c. In that context, it may refer to an office named after the main poles that support a house and its roof or may indeed have to do with a “foot” or “step” in taking a certain position indicative of future power.

It is easy to see here that if a reader takes the position that the logogram specifically means “coyote,” it would cause difficulty by requiring an added step to switch from that to the meaning of “foot, leg, or pole” to grasp literally the message that is being relayed. But if instead, the reader takes the strategical approach that this logogram writes the word *ook*, and uses its phonetic content along with that of its associated signs and wider context to arrive at the meaning of the word – not the meaning of the logogram – then the reader can proceed in precisely the same way as when hearing a spoken message. To the degree that one uses the signs of the Maya script as part of a writing system instead of a series of signs with meaning, it becomes easier to use it in an efficient manner to understand the literal message the writer imparts.

The top sign in Figure 54a is the logogram T207a that pictures the rattles of a rattlesnake. Its value is **'OCH** as verified by both the phonetic complement **chi** and the substitution for it by other logograms in well known idioms examples of which are shown in Figure 54b-c. They read *i ochb'i(h)aj* and *ochb'i(h)aj* respectively and mean “He/She road-entered” an idiomatic way to say a person “died.” While there is little disagreement on the actual decipherment because of the phonetic substitutional evidence, there is some disagreement on the evidence for a connection to “rattlesnake.”

There is evidence for *och chan* meaning “boa” or “king snake” in Yukatek, Itzaj, and Mopan. However, although most of the references point to “boa constrictor” rather than “rattlesnake,” some do just mention “large snake.” For example, besides a specific reference to a boa, Bolles (2001:2741) also includes the meanings “*culebra cualquiera*”

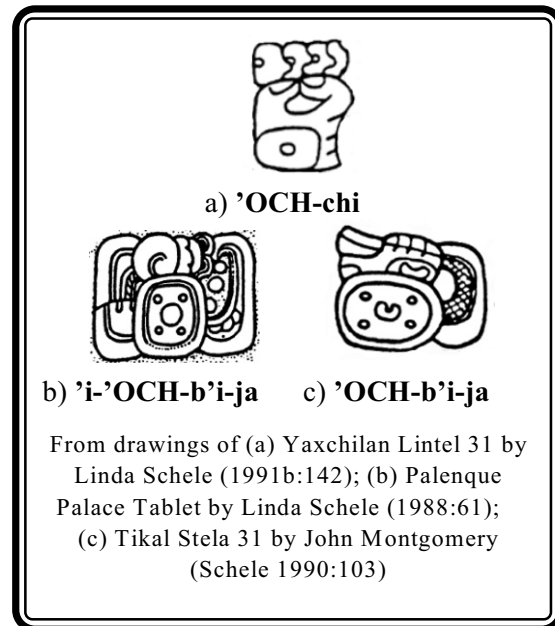


Figure 54. Logogram writing homonym of word referring to depicted content: **'OCH**

(“any kind of snake”) and in a separate listing “*Och can*: culebra (una grande)” (“snake (a large one)”) (Bolles 2001:2742) as does Barrera Vásquez (1980:594).⁶⁰

Again what is important is that the logogram **'OCH** in these contexts, instead of writing a word referring to a “large snake,” “rattlesnake,” or “rattle,” is used to write the Ch'olan word “enter.” This is another example which shows that the strategy within the system is to write the word *och*, whatever its meaning, and so to allow the reader to arrive at the meaning of that word from the context assuming only the reader's recognition of the logogram's value as **'OCH**. Of course, this is precisely what a person must do when hearing the spoken language in order to understand what someone else is saying. The person hears “*och*” and grasps the meaning by interpreting it in its context.

2.2.8.7.3 Interchangeability Among Logograms

The logogram T764 **CHAN/KAN** shown in Figure 55a could have been included as one of many rebuses in the last section. It depicts a snake head and “snake” in Ch'olan languages is *chan*. In some names, the word it writes actually means “snake.” In names of some rulers, polities, and gods, the much older pronunciation *kan*, from prior to the Tzeltalan and Ch'olan language split, has been preserved. In those cases, it is usually preceded by the phonetic complement **ka**. But even then the word that it writes, *kan*, usually still means “snake” as part of a name. At other times, however, it is used to write a word or root whose meaning is not related to a reptile. Figure 55b shows T764 used in a clause that occurs often in the texts of

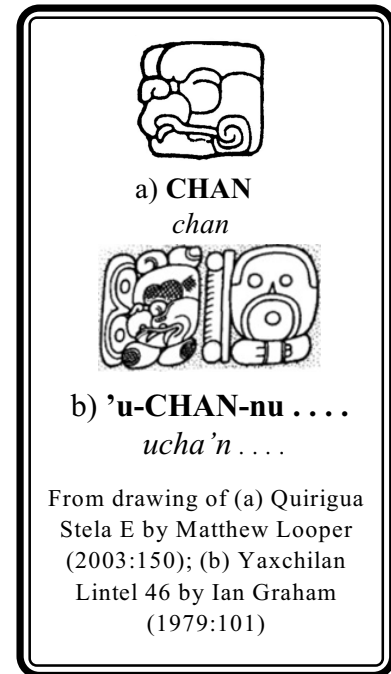


Figure 55. CHAN (T74 “Snake Head”) as a “rebus”

⁶⁰However, in the entry for *och can*, Bolles, ;but not Barrera Vásquez, also adds “sin poncoña” (“without venom”).

Yaxchilan. It is often used in conjunction with a possessive pronoun to refer to an elite person captured by the person to whom the pronoun refers. It is sometimes preceded by the phonetic complement **cha**.

The word root here, *cha'n* is still widely used in Ch'ol to mean “master, owner” (“*dueño*”) (Hopkins and Josserand 1988f:ch3) and along with an ergative pronoun to indicate possession *acha'n* “yours” (“*tuyo*”) (Aulie and Aulie 1998:30).⁶¹ In short, this is another good example of how a sign that depicts one thing, here a snake, can be used for its homophonic value to refer to another word. The recognition of its phonetic value takes place on the glyphic or sign level. The recognition of its meaning takes place on the word level. This distinction is also reflected in the difference between its transliteration and its transcription. The transliteration of the relevant logographic sign in Figure 55b is simply **CHAN**. Nothing further than that can be added without further information coming from elsewhere. Even a transliteration as **KAN** is regularly signaled by a **ka** phonetic complement except when the scribe assumes it is clear to the intended audience, such as in the case of names that occur very often. Also, in this case, the modified disharmony theory seems to be applicable, since the word in context is indeed meant to be *cha'n* and is even written as such in modern Ch'ol (usually given as *cha'an* in the sources) although that language, along with the rest of its siblings in varying degrees, no longer regularly exhibits vowel length. Thus in this case, it is written with a final **nu** syllable indicating a glottal stop in the context of an /a/ root vowel. Just as the scribes' signal the length of the vowel separately from the logogram itself, so too should the transcription but not the transliteration show the difference in vowel length. For that reason, the transliterated value of the logogram in either case is **CHAN**, while the

⁶¹The noun in these contexts has often been translated as “guardian,” relating it to *kānān* “watch over, guard,” variations of which are present in all the Yukatekan, Tzeltalan, and Ch'olan languages including Ch'ol. This clearly points to a Proto-Mayan word beginning with /q/ instead of /k/ and so the Greater Tzeltalan sound change would have produced /k/ and not /ch/. That is why all the Ch'olan languages have variations of *kan* meaning “guard, care for” and, as a noun, “guardian.” That is also why it cannot be the word written in these passages.

transcription is either *chan* or *cha'n* depending upon the vowel of the phonetic complement and the context.

Besides being used in rebus fashion to write homophones or near homophones, T764 **CHAN** is a member of a set of logograms that at times can substitute for each other. Perhaps the most common group of this sort is that comprising the Maya numeral four (Figure 56a), the sky glyph T561 (Figure 56b), and the snake glyph T764 (Figure 55a). The first, the row of four circular dots in Figure 56a, most often occurs in numerical contexts as is to be expected, and is the logogram **CHAN**. The second, Figure 56b, which consists of a stylized “bearded dragon” or bearded snake in the bottom half and a variety of symbols in the top, is also **CHAN** but is iconographically related to the sky. The third, in Figure 55a, which portrays a snake head in stylized form and is also **CHAN** (or **KAN** when so indicated by a phonetic complement) is often used when referring to snakes, especially in names of humans and gods. These logograms can and do substitute for each other in some cases even where the contexts have not changed. Examples of such substitutions can be seen in Figure 56c-f.

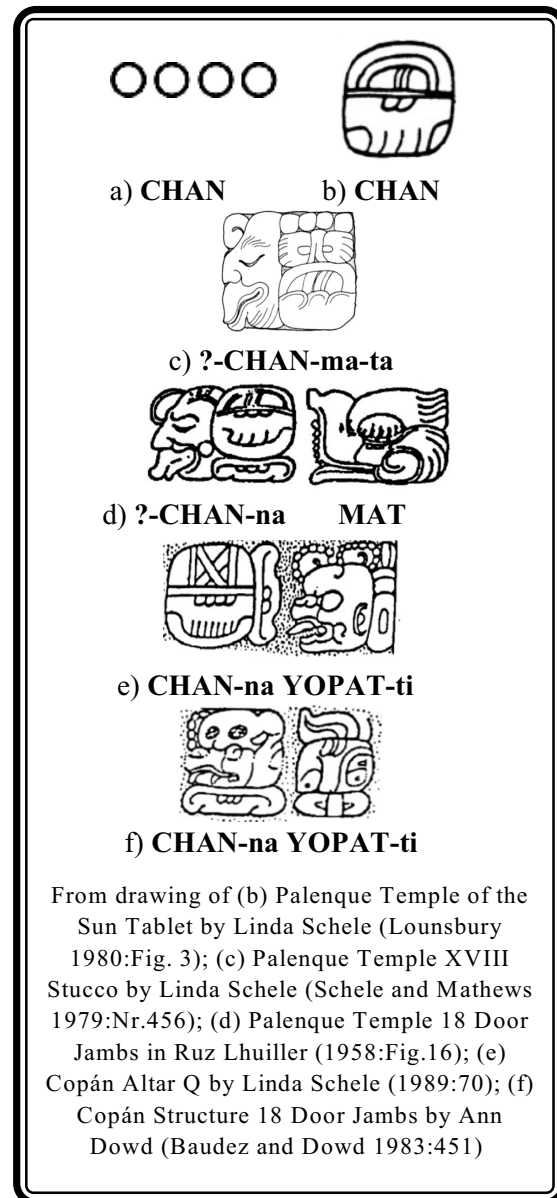


Figure 56. Interchangeable set of logograms

An interesting question is, since these three logograms could substitute for each other, why would there be three different logograms. Some have speculated that over time, the pronunciation of these three words became less differentiated. Since their substitution for each other occurs relatively late, this is a possibility. However, the nature of these three logograms may also play a part in their substitutability. First, the referents are all relatively easy to depict pictorially or iconographically, and so separate logograms would have been likely in any case. Second, the sign for the number four is itself part of a larger complex involving the method of representing numbers among the Classic Maya. Whether or not the word for “four” may have been a homophone or near homophone for “snake” or “sky,” it would have still been represented as four circles or dots within the number system. This would still allow for substitution especially outside of pure numerical contexts and especially when names or titles might be involved. One example of this substitution is that between “four” and “sky” in Figure 56c-d when writing *chan mat*, which is part of the name of the father of *Ahkal Mo’ Naab’* of Palenque. Another is the substitution between “sky” and “snake” in Figure 56e-f when writing the last part of the name of the Copán ruler *Yax Pahsaj Chan Yopaat*.

The pictorial content of the logogram usually reserved for writing *chan* “sky” seems to involve snake-like characteristics, albeit on more abstract or iconographic level. It may indicate that when the logogram itself was put into service, there was already a connection made between a bearded sky beast and snakes. While that alone might not have been enough to allow T561 **CHAN** to substitute for the T764 **CHAN** “snake” logogram or vice versa on a regular basis, the door seems to have been occasionally seen as open for doing so.

Finally, that T764 **CHAN** “snake” is also used to write *cha’n* “master, owner,” provides evidence for some flexibility in the use of logograms to write near homophonic and not just homophonic words (cf. Houston 1984). Historically, the word for “sky” would be much closer in Proto-Mayan reconstruction to **ka’nh* or in Yucatec *ka’n* and in Itza and Mopan *ka’an* (cf. Kaufman 2003:486). Yet, although both logograms occur in

that context, most of them are written with the T764 **CHAN** “snake” sign instead of the T561 **CHAN** “sky” sign. It should also be noted in this context that all the members of the Greater Tzeltalan family make no distinction between *chan* “snake” and *chan* “sky.” Nevertheless, the use of the “snake” glyph to write *cha’n* “master” is evidence that a slight difference in pronunciation would not have prevented this interchangeability.

Whatever one’s stance is on that particular question, the substitution of one for another still provides evidence for the argument that these logograms do not **mean** what they depict, but rather **write** words whose meaning has to be determined in context. It is not likely that one would read or assume “snake” and then change it to “sky” upon later reflection, but that one would read *chan* and while grasping its meaning from the context. Only in cases of correcting an initial failure to communicate would that happen. But such corrections occur in communication with the spoken language as well.

2.2.8.7.4 Logograms Used to Write Suffixes

There are very few logograms that serve to write suffixes. Part of the reason may be that most suffixes and enclitics are not based upon word roots. Some that are at least CVC syllables, such as the positional verb suffixes *-laj* and *-waan*, are always written using two CV syllabograms. One among a few exceptions to this is the suffix *-taak*. Laughlin (1975:26) includes *-tak* as an archaic “collective plural of possessed nouns” in San Lorenzo Tzotzil. It is still present in Ch’orti’ as well but is no longer productive and is limited to a few words such as *ixiktak* “women” (Pérez Martinez 1994:43) and *maxtak* “children, youths, family” (Pérez Martinez et al. 1996:137-138 and Wisdom 1950:525). The word *ixiktak* also occurs in Chontal (Keller and Luciano G. 1997:430). In Tumbalá Ch’ol (Aulie and Aulie 1998:231), *-tac* (*-tak*) is used to form the plural for non-human things and beings, for example, *muttac* “chickens” and *te’tac* “trees.”

The use of this collective plural in the Classic Period was first discovered by epigraphers Alfonso Lacadena and José García Campillo in its syllabic version as shown in Figure 57a and later by David Stuart (Stuart et al. 1999a:25) in its T547 logographic versions as illustrated in Figure 57b. Because that passage which shows the same phrase as the first one is somewhat eroded, Figure 59c is included to provide a clearer view of the infixed **K'IN** sign. It transcribes as *ochk'in ajawtaak* “the west lords.”

The plant itself could be an avocado tree since the glyph without the infixed **K'IN** sign is T559 (Figure 58a) and is used to write the month

name *Uniiw*,
K'ank'in in
Yukatek.

Instead of an

infix **K'IN** sign it usually includes a cross-hatched or circle which may be an iconic representation of a gourd or the bottom view of an avocado. *Uniiw* is attested as *un* “avocado, aguacate” in most Ch'olan languages, for example Ch'orti' (Wisdom 1950:747), and in Tzeltalan (Kaufman 1972:113) as *on*. But outside of the day name context, a similar sign, as shown in Figure 58b, is often a syllabogram with the value **tzu** likely based pictorially upon the calabash tree which in Colonial Tzotzil was *tzuh* (Laughlin

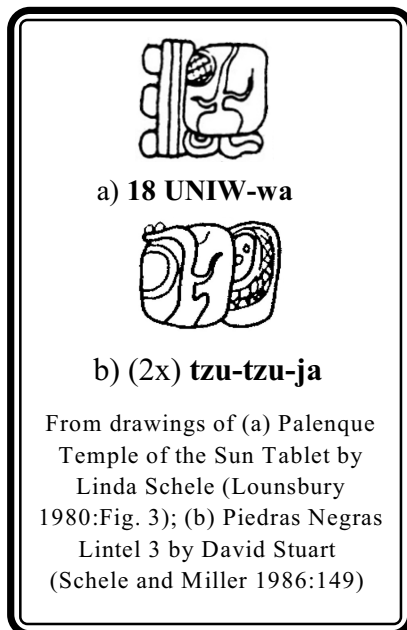


Figure 58. Signs similar to the logogram that writes *-taak*

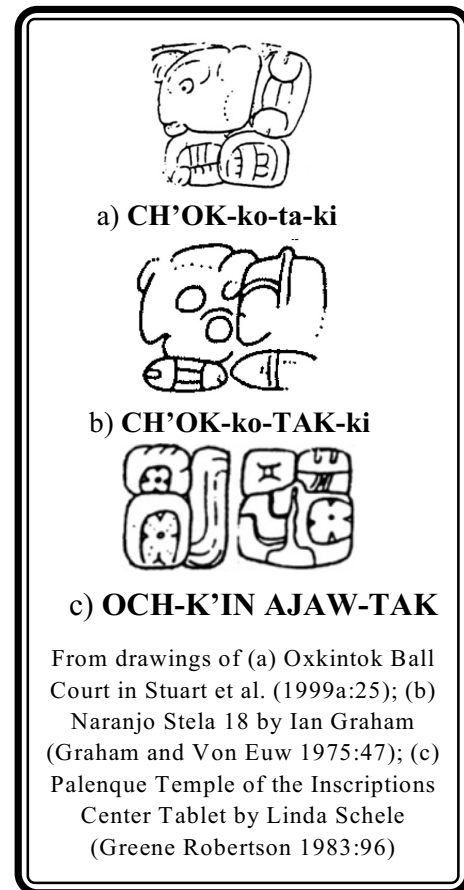


Figure 57. Different ways of writing the plural suffix: *-taak*

1988:814)⁶² In this case, it is used to write *tzutzaj*, the passive form of this verb and means “be completed, finished.” This particular sign is also similar to T547 (as in Figure 57b-c), but instead of the infixed day sign or darkened circle, it includes a circle with what appears to be the “mirror” or “celt” sign instead.

The **K’IN** sign in the logogram used to write *tak* provides pictorial clues to its origin. In Yucatekan and Ch’olan, *k’ihn* also means “hot, warm” and is no doubt related to the word *k’in* “sun, day.” With the infixed day sign indicating “heat” or “hot weather” iconographically, the value **TAK** for the logogram T559 is likely based one of the usual results of hot weather, drought or at least dryness. *Takin* is the word for “dry” or “dry up” in Yucatekan, Tzeltalan, and Ch’olan (cf., for example, Kaufman 2003:495; Laughlin 1988:307; Delgaty and Ruíz Sánchez 1978:195).

There is little doubt, of course, that the suffix itself has nothing to do with dry weather except for homophony with the word referring to it. What the writer aims at is the CVC syllable *taak*. As far as its primary use in writing a language is concerned, **TAK** is not meant to recall for the reader either trees, heat, or drought, but rather to allow for reading of the suffix *-taak* which, along with the word to which it is attached, indicates that a group of more than one is meant. Of course, when learning how to read the language, recognizing what was depicted would have been very useful for remembering the values of signs such as these. They were apparently chosen with that in mind. As far as the basic makeup of the set itself, the gourd tree portion of the sign itself seems to serve a purpose similar to the “**IMIX**” sign, with infixes completely changing its values and even its classification as either a logogram or a syllabogram. Also similar is its service as a calendrical sign as well, in this case, **UNIW**.

⁶²This was written originally by the author of the Colonial Santo Domingo dictionary as *cu^h* but transcribed by Laughlin (1988:177) without the *h* as he himself notes. It is likely that the glottal /h/ became silent in Tzotzil some time after the data for the original dictionary was gathered.

Another example of a logogram used to write a suffix is **NAL** as shown in Figure 59a. It enjoys wide use in the Classic texts. Pictorially, it is probably an iconographic representation of an ear of corn, or at least of foliage reminiscent corn; and that is also its most frequent meaning as a root in the Ch'olan and Yucatekan languages. As a suffix, its frequency and the variety of contexts in which it appears led some time ago to an interpretation of its general meaning as “place” (cf. Stuart 1987:18-20) although not yet explicitly linked to an attested morpheme. For example, **K'AN-WITZ-NAL** in Figure 59b is used to write *k'an witznaal* and means something like “yellow-mountain place.” In this case it is also part of the “emblem glyph” of the site of Ucanal: *kuh[ul] k'an witznaal kalo'mte'* “holy yellow mountain *kalo'mte'*.”

As noted by Stuart and Houston (1994:21), **NAL** is also one of the signs that has a partial form as well as full form which is shown in Figure 59c. So, although the sign **NAL** is usually meant to be read last, the kernel-like portion of the **NAL** sign is figuratively covered over by other signs in the block. As with the previous sign, **TAK**, the suffix itself has likely nothing directly to do with the iconographically portrayed maize ear. However, the origin and current use of the suffix *-naal* is not as clear as is that

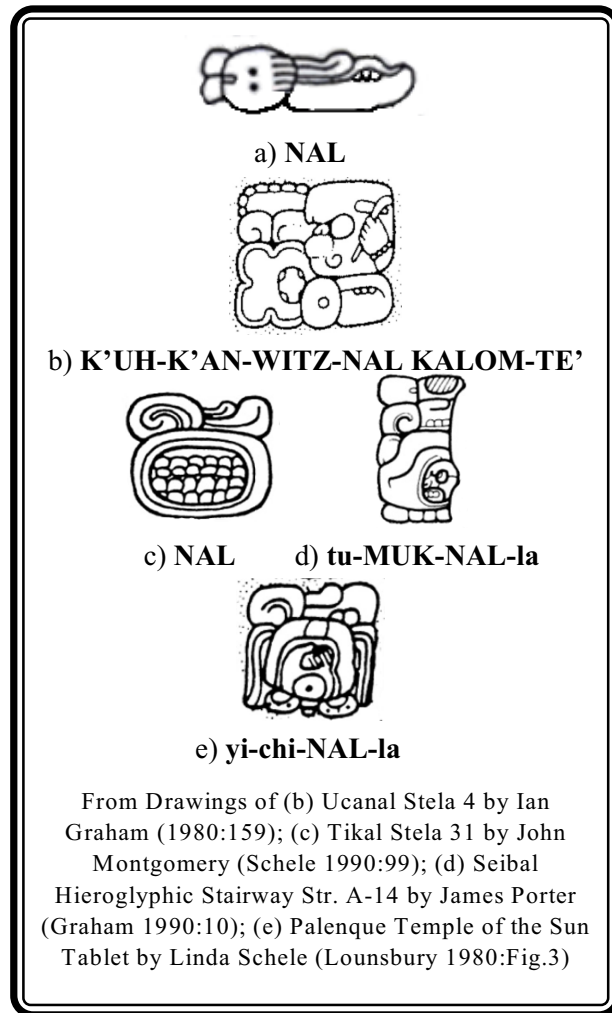


Figure 59. Logogram used to write a suffix

of *-taak*. A suffix *-naal* is still productive in Yukatek but not with the same meaning.⁶³ Still, there are a few cases where its use is similar to that in the Classic period texts. One of these, attested in Colonial Yukatek as *muknal* (Bolles 2001:2576-2577) and in Colonial Tzotzil as *mukinal* (changed to *mukenal* by Laughlin 1988:262), means the same thing as in the Classic texts. It refers to the place or building in which someone is buried, a “sepulcher” or “tomb,” and one of its Classic period versions is shown in Figure 59d. Another very interesting example from Colonial Yukatek is *yocnal kin* or *yocolnal kin*. According to Bolles (2001:2631) this means, in Spanish, “*puesta del sol, ó ponerse el sol*.” In English, this would be “sunset.” But a closer look at the Yukatek allows one to easily connect *-nal* here with the meaning of place. Since *ok* means “enter” in Yukatek, the phrase could be interpreted as “the entering place of the sun.”

Finally there is another very common use of *-naal* in the Classic period shown in Figure 59e. It is most often written as **yi-chi-NAL** and transcribed is *yichnaal*. Forms using this word root *ich* are attested in Tzotzil. Colonial Tzotzil (Laughlin 1988:142) has ‘*ichon* as “front, presence” with the original dictionary usually occurring in possessed form, for example, *yichon* “his/her/its front” or “in front of her/him/it” (cf. Laughlin 1988:914). The related Yukatekan root is *ik* and it does occur with the suffix *nal* as attested in Bolles (2001:1823) for Colonial Yukatek “*tijen yan yicnal Juan*: here I am with Juan, in the company of Juan, in his house where he is” (my translation). Hofling and Tesucún’s (1997:157) Itzaj dictionary lists *äk* as a positional root meaning “*ponerse de frente*. face.” It also occurs in Itzaj with *nal* as *äknal* “con; (alguien), estar presente con. with (someone), be in another’s presence (stationary).”⁶⁴ It is very likely that the

⁶³For example, Bolles (2001:2631) explains the active use of this suffix in Colonial Yukatek in this way: “*-nal* . . . a suffix which acts something like the English word -keeper. *cabnal* = bee keeper, from *cab* = honey and *-nal* = keeper.” In another example, *ah colnal* refers to the “owner or master of a milpa” (my translation).

⁶⁴Note that the root *ich* in *yichnal* of the Classic texts should not be confused with the Yukatekan root *ich* which means “face.” Instead, the related root in Yukatek is *ik* and in Itzaj *äk* as noted. It is *ich* in the Ch’olan of the classic period because of the sound change in Greater Tzeltalan of Proto-Mayan /k/ to /ch/ which did not take place in Yukatekan. The corresponding word for “face” in the Ch’olan languages is *(h)ut* (Kaufman and Norman 1984:120) and in Colonial Tzotzil *sat*. The sound change from Proto-Mayan /t/ (continued...)

-*naal* suffix here also indicates “place.” Thus a literal translation would be “his front place” and more colloquially, “the place [at] his front.

At any rate, none of these examples mean or refer to a “corn ear” or “corn foliage” and so this is a clear example of a logogram whose pictorial representation does not match its meaning but only its lexical shape. It is still further evidence that the intent is to use logographic signs to write words which are then evaluated for meaning as they are read in context rather than examining the meaning of logograms separately from the words, phrases, and sentences they write.

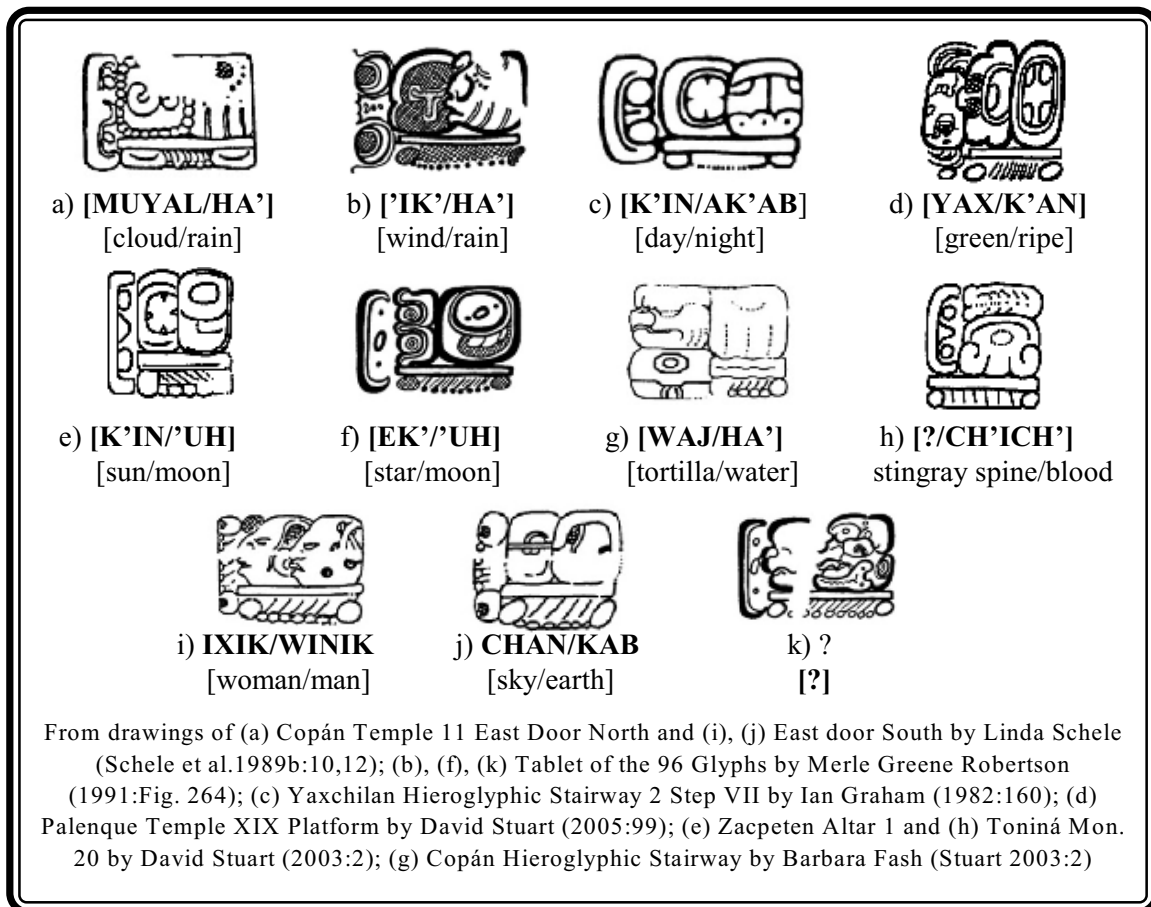


Figure 60. Pairs of logograms writing verb not written by either member of pair

⁶⁴(...continued)
to /ch/ resulted in Yukatek *ich* (cf. Kaufman 2003:324).

2.2.8.7.5 Pairs of Logograms Used to Write Third Word

The set of very unusual logograms shown in Figure 60, despite their differences, all write forms of the word *tz'ak*. This conclusion, first suggested as one of three possibilities by Berthold Riese (1984:284-5) has been recently revisited and reinforced by David Stuart (2003). Stuart was commenting upon the proposal by Timothy Knowlton (2002:11-13) that the pairs shown in Figure 60 as cloud/rain (Figure 60a), wind/rain (Figure 60b), day/night (Figure 60c), star/moon (Figure 60f), tortilla/water (Figure 60g), woman/man (Figure 60i) and sky/earth (Figure 60j) are all kennings that substitute for the usual 'u-TZ'AK-'a'aj combination. In other words, Knowlton (2002:12-13) suggests that the diaphrastic meaning of, for example, "sky and earth" is the same as that of *utz'aka* (*utz'akaj*?) although not using the same words. Instead "sky and earth" would be a metaphor for "creation" and creation in Maya texts is most often linked to counting. "cloud and rain" and "wind and rain" have to do with prognostications, and so the reader would recognize *muyal ha'* and *ik' ha'* as allusions or diaphrastic references to counting time.

Countering this interpretation, Stuart (2003:1) stresses that "the two elements are not to be read as separate signs, but instead stand together as a single unit representing the word **TZ'AK.**" Riese had already noted that the affixation of these glyphic combinations was precisely the same as that for the usual T573 **TZ'AK** sign an

example of which is included in Figure 61a. Stuart adds the example shown in Figure 61b, which also includes the syllabogram **ka** further reinforcing the **TZ'AK** value. On

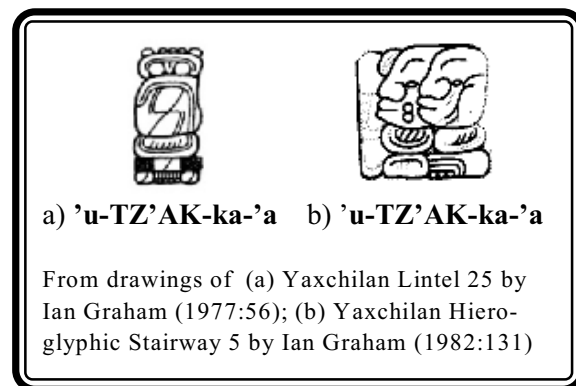


Figure 61. Two different logograms both writing same root

the level of the actual words being written, the result in each of the examples in Figure 60 is the same: *utz'aka*.⁶⁵

But just how is this to be interpreted? When one looks at the individual glyphs that make up the pairs represented in Figure 60, they surely are identical to logograms that are otherwise used to write particular words. How can it be that they instead simply have the value **TZ'AK** or, put in another way, that they write just one word root, *tz'ak*? Although this particular strategy for writing a word is extremely rare or perhaps unique in the Classic Maya writing system, it is much easier to understand within the framework of the discussion of logograms and syllabograms up to this point. Although many of the syllabograms that have been analyzed are pictorial representations of particular entities, the signs still do not have the value of words representing those entities, but rather of syllables that use part of those words. It is also true that logograms may represent pictorially specific entities and that the value of their phonetic equivalents may match precisely what is pictured. However, their intended lexical referent is often rather a homonym, a word that is phonetically equivalent but has a different meaning. In the case of a syllabogram, the intended syllable is only a part of the word referring to what is depicted. In the case of homonymic logograms, the phonetic makeup of the word intended matches what is depicted, but the word actually being written is not the word denoting what is depicted but rather a different word with the same or almost the same pronunciation.

The pairs discussed by Riese, Knowlton, and Stuart add a new level to this analysis. Each of the signs are indeed logograms. In the day/night combination, these are indeed the logograms **K'IN** and **AK'AB'**; the star/moon combination indeed depicts the **'EK'** and **'UH** logograms. But these logograms are employed not to write those actual words but rather to write a word that embodies a relationship referred to by the word

⁶⁵Note that this could also be *utz'akaj* since the same glyph is also used for the *aj* agentive or for the usually male title “he of” or “Mr.” However, that morpheme itself is often shortened to /a/ in actual speech. This occurs in some languages and dialects more than others. In any case, there is little agreement at this time as to just how this suffix is to be interpreted.

tz'ak. Their intended value is **TZ'AK**. Similar to the way a pictorial or iconic representation is used to write a syllable or word related to what is depicted, so here the relationship between two different entities represented by logograms is used to write the word *tz'ak* and not the words that they would each write individually in other contexts. Nevertheless, the intended final value is not an idea or a concept. They are not ideograms that are open for each reader to supply a general wordless idea or concept that matches the depicted relationship. Nor is the reader expected to pick or plug in the word that seems to best express the depicted relationship. Instead, the relationship alluded to by the use of those logograms, provides a clue allowing the reader to recognize the root word as *tz'ak* and none other, even if it is a homonym.

With the added syllabograms, as is made even clearer by the example in Figure 61b, it is meant to be read as the word *utz'aka*. So even these rare cases in which a pair of logograms is used to trigger the root *tz'ak*, the final goal of the script is still to write a word, not to trigger directly an idea without writing a word with a particular pronunciation. The meaning for the current sentence is to be sought in the word *utz'aka* and not in the combination of the two signs. Like the pictorial representations, they are intended to aid the reader in recalling the intended word, and to do so in a poetic fashion, but they are not meant to be read as separate words nor is the intended lexeme to be replaced by ideas that call for thought without words.

Stuart disagrees with some previous interpretations of these pairs as representing Straussian opposites, based upon the structuralist views of Levi Strauss, and notes that several of them do not appear amenable to it. Instead, Stuart encapsulates what he sees as the intended relationship between the entities represented by the logographic pairs in the reconstructed Proto-Ch'olan meaning offered by Kaufman and Norman (1984:134) for the word *tz'ak*: “complete, whole; enough.” While not intending to dispute the presence of this meaning in the Ch'olan languages, I would like to suggest another slightly different interpretation of the relationship intended by these pairings. The meanings “complete, whole, enough” represent only one set among several meanings

attested for the root *tz'ak* (or *tz'ahk*) in the Tzeltalan and Ch'olan languages. This set of meanings does not seem to fit as well in some of the contexts in which the root *tz'ak* appears in the Classic inscriptions. What is more, there is another word root that is used repeatedly in the same body of texts to mean “complete,” especially when referring to time periods and counts, which is *tzutz* as deciphered by Stuart (2000). This root, meaning “complete, finish, end” appears in the context of the completion or ending of a time period, most often that of a particular score of years (*winikhaab'*) or a particular quarter or half of that score. It also appears at times with specific numbers of 360-day years (*haab'*) and to larger time period endings as well. It is not used to refer to calendar-round dates. The word *tz'ak* never occurs in these contexts, which seems unusual if indeed the core meaning meant by the scribes in these contexts was indeed “complete, whole, enough.” Such a meaning would also seem inappropriate for *tz'ak* in these distance number contexts which usually provide a count of days, months, and years between two events, concentrating upon the passage of these days, months, and years, one after another, and seemingly stressing the distance and the sequential path taken, rather than the completion of the period. Of course, variations on the traditional ad hoc meaning offered of “count to” are also not convincing especially in light of these paired signs used to write the word.

Since the Ch'olan languages share a common linguistic parent with the Tzeltalan languages, word meanings that are shared by members of both groups, are likely to have been present in that proto-language. The Ch'olan and Tzeltalan branches of Greater Tzeltalan are likely to have parted before the Classic Period, and so meanings that are shared by both groups are likely to have predated that split. This is even more likely to be true if we examine meanings from two languages which are also widely separated geographically such as Colonial Tzotzil and Ch'orti'.

In addition to “complete,” Colonial Tzotzil (Laughlin 1988:178) provides meanings such as “fasten, join, mend.” The context of the examples given refer to “mending by fastening” including to “graft” and to “mend broken bones.” It also includes

other examples referring to adobes being “properly laid” and “well-joined” and references to “follow” and coming “after” in both literal and figurative senses. It is used to refer to “knuckles” and “joints” of both the hands and feet. It is also used as a numeral classifier for counting generations. Laughlin’s (1975:99) modern Tzotzil dictionary adds similar examples such as “tied together,” “tie behind each other,” and is even used to refer to “married couple” and, as a synonym for being married, “they are joined now.”

Ch’orti’ continues along the same lines with Pérez Martinez et al. (1996:227) providing “connectar” (“connect”) and “añadir” (“add to”) in addition to “*bastar*” (enough) and “*suficiente*” “sufficient.”⁶⁶ Wisdom (1950:735) likewise has “bundle, collection, joint, splice.” His examples cover much of the same ground as those given by Laughlin for Colonial Tzotzil such as “lay out end to end” referring to adobe bricks, “joints” and “knuckles” referring to fingers and toes, and “joining and splicing” referring to mats or beams used in building a house.

Using these definitions and examples to determine the connection between the pairs of signs in the Figure 140 logograms instead of the concepts “complete, whole, enough” seems to bear more fruit and to make the relationship between them much more concrete and perceptible. There is little question that both clouds and wind are joined with rain as shown in Figure 60a and 60b respectively. But what may be even more appropriate or relevant to note with these two is that rain often follows upon clouds and wind. Their connection is so close that, at least if one considers certain kinds of clouds and winds, rain is often likely to come after them. It is as if they were bound or tied to one another. The same can be said of day and night in Figure 60c which follow each other in a row as surely as well-laid bricks. And almost as surely, as in Figure 60d, after being green and unripe, vegetables, fruits, and, most of all, corn become yellow and ripe. Similarly as in Figure 60e, after the sun comes the moon, they follow each other in time.⁶⁷

⁶⁶In some contexts Pérez Martinez et al. (1996) include an infixed /h/ and in others not, as does Wisdom (1950) although the general meaning remains the same.

⁶⁷Of course, the moon does not always follow the sun, but when it appears, it is easiest to see after
(continued...)

Also, as in Figure 60f, the moon also often follows the first stars seen in the sky, and indeed, they are most often joined together in the night. As in Figure 60g, after eating tortillas (or “food” or “bread”) one needs water and so they too are joined together. One might even say that water should follow bread to “wash it down.” The bread and water connection is strong in most, if not all, cultures. At least for the rulers and the elite, the use of a stingray spine surely means that blood-flow will follow as intimated by the example in Figure 60h. Next with a female comes a male and indeed they become joined in unions, as in Figure 60i, and as indicated in one of the Tzotzil meanings of *tz’ak*. Finally, at the horizon, earth joins the sky. All of these sign pairs clearly and without hesitation can be seen to fit well with the meaning and connotations of the word *tz’ak* as “join” or “follow in order”. Therefore these signs are used together as logograms with the value **TZ’AK**. In each case the second of the pair either follows upon the first or joins with the first and so are viewed as joined in linked pairs with one coming with or after the other.

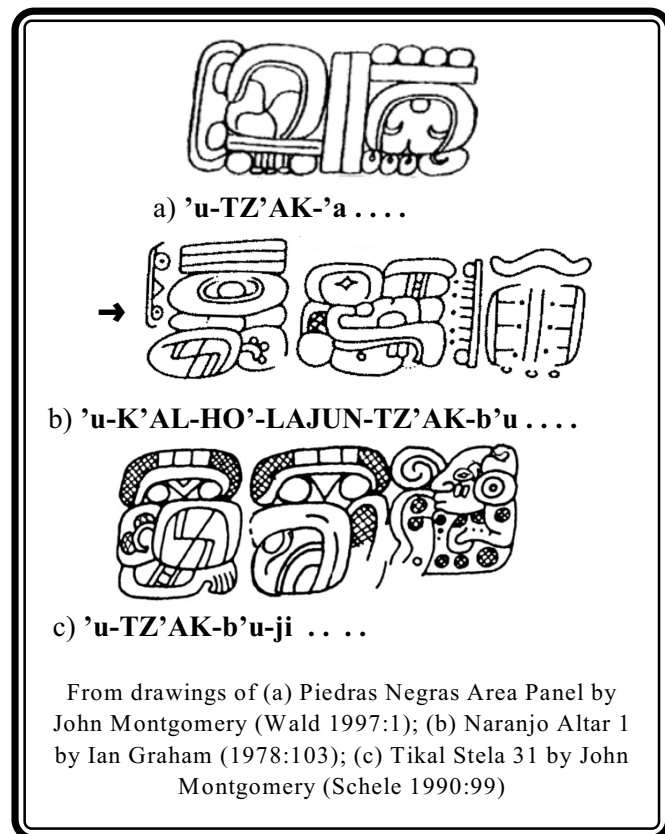


Figure 62. More common versions of **TZ’AK** logograms

⁶⁷(...continued)

the sun sets. Also, despite the occasional visual appearance of the moon during the day, most cultures associate the moon with a time after the sun sets.

Even more important for this discussion is the connection of *tz'ak* with the calendrical context of distance numbers in which it appears most often. Meanings such as those just reviewed are easily applied to the passage of days, months, years, and scores of years as they are counted off, laid down one after another, joined one to another as they measure the distance between two events in the historical timelines recounted in the inscriptions. That is just what they do after the DNIG (distance number introductory glyph) as shown in Figure 62a. An excellent example of a distance number that emphasizes the joining or laying out of one day after another comes from a recent mural found at the site of Ek B'alam. As noted by Alfonso Lacadena (Grube et al. 2003a:10-11; 2003b:17), instead of using numbered coefficients of 9 days and 2 twenty-day months as usual, the scribe writes out the numbers and day names of all of the intervening forty-nine days. The effect is a very visual representation of one day following in order after another until the next relevant calendar round date is reached.

Another important consideration concerning the interpretation presented here is that the proposed meaning and connotation also fits in superbly with the numbered sequences of rulers. One of many examples, this one from Naranjo Altar 1, is shown in Figure 62b. These passages too imply the succession of one ruler after another with no implication of completion or wholeness. Instead, each in the line of holy kings follows one after another in order without the goal of bringing the string to an end.

This meaning also fits well when **TZ'AK** is derived as a transitive verb and used in the sense of “guard, govern” which may consist of carefully putting things in order as in the Figure 62c example. This is the meaning it has, for example, when derived by a causative suffix in Colonial Yukatek (cf. Barrera Vasquez 1980:873 “guardar, conservar”).

Finally, it also relates well to the use of *tz'ak* in matters of health. Bones are set and rejoined in healing and the body is put back in order through the taking of herbs and medicines.

2.2.8.8 Syllabograms That Write Words

As has already been noted above in other contexts, a few syllabograms can be used to write words but only in very specific and circumscribed circumstances. Although actual occurrences of these syllabograms writing words are frequent, the number of different words involved is very small. These occurrences are completely dependent upon the character of the words being written, not upon any special characteristic inherent in the specific syllabogram used to write them.

Figure 63a-c show several examples of them.

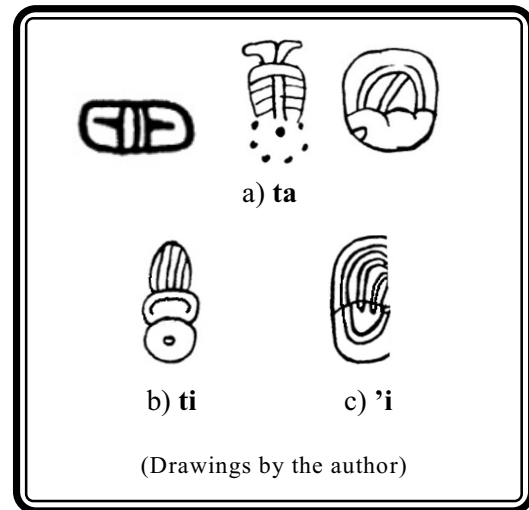


Figure 63. Syllabograms that write words

As expected, the words written in this way themselves have the shape CV as do the syllabic glyphs. As noted earlier, *ti* and *ta*, when used as prepositions meaning “in, at, on, etc.” in the Ch’olan languages, do not end in a glottal stop. Therefore, only one syllabic sign is needed to write them as shown in Figure 63. In the case of the conjunction *i* “and then,” shown in Figure 63c, the issue is slightly complicated because of the glottal stop issue that has already been discussed in great detail in Section 2.2.6.1. However, regardless of which side of that issue one espouses, the conclusion is the same, that is, it too is written with one syllabogram, either one with the shape CV or V.

There are also a few other words that over time and in certain areas may have also been written with one CV syllable. Among them are *b’a* (*b’aah*) “image, self, head, body, gopher” and *b’i* (*b’ih*) “road, path.” In the case of *b’a*, it is important especially in early inscriptions to distinguish between the use of T757 as a logogram instead of a syllable. However, in some of the late inscriptions, this sign may be used as a syllable and the spelling may reflect instead the elision of the glottal /h/ in the pronunciation of the word itself in speech.

This elision of the final glottal /h/ is even more likely in the word *b'i* (*b'ih*) because T585 was most likely interpreted as a syllabic sign even in the Early Classic Period. So, writing the word for “road, path” with a CV syllable most likely reflects its actual pronunciation.

2.2.9 Extra-Linguistic Pictorial Embellishment of Syllabic and Logographic Signs

There are several examples of what appear to be purely extralinguistic embellishment among the Classic Period texts. Only two of them will be mentioned here. Figure 64a shows a short passage from the Palenque Tablet of the 96 Glyphs. Figure 64b shows the verb enlarged to better see the infixed rabbit. It is without doubt the most well-known example of such embellishment. The sign T181 **ja** is used here along with **la** to write the intransitive positional suffix *-laj*: *chumlaj ta ajawle ux ?-n mat k'ihnich k'an joy chitam*. “He was seated in rulership

Yellow Encircling Boar.” In other words, in context, it is clearly a syllabic sign.⁶⁸

What is different about this particular occurrence is that it has a portrait of a rabbit infixed into the sign itself. What is more, the rabbit’s ear is shown with infixed “*Etz'nab*” markings such as appear on T759, a sign featuring a rabbit portrait which has

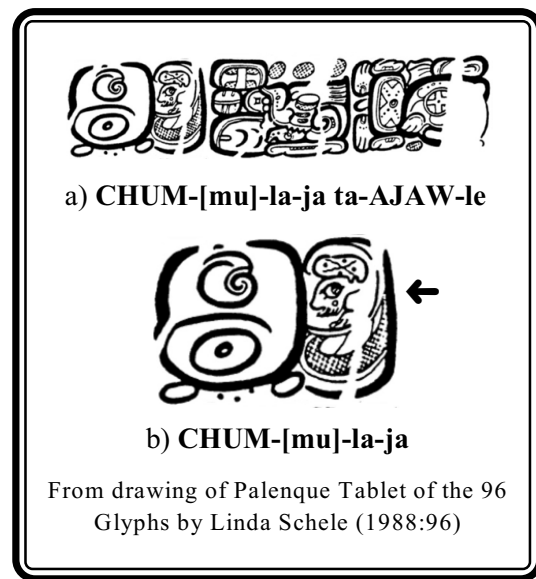


Figure 64. Extra-linguistic embellishment of a syllabogram

⁶⁸The issue of “grammatical logograms” or “morphosyllables” is not relevant for the phenomenon being addressed here. The validity, or lack thereof, of such a glyphic category will be discussed in detail below in Section 2.2.10.

not yet been securely deciphered. What helps to explain its presence here in this sign are at least two coincidences.

Signs similar to T181, **ja** in the Figure 64 example, when not used as a syllabogram, can appear in a few other contexts as shown in Figure 65. It appears in the context of the lunar information often included in Long-Count dates. As shown in Figure 65a, when reporting the time since the arrival of the current moon, T181 or the similar T683 sometimes appears as part of the glyph block writing various forms of the verb *hul*. Since it does not change the meaning or form of the verb in that context, it may be simply adding the connotation of “moon” to the context. An alternative would be to interpret it here as **’UH**, a logogram for moon. As such it would be supplying the nominal subject for the verb and would help to explain why the hand sign (T713b) can also appear in some cases without it, since nominal subjects are not mandatory. The pronominal subject, albeit in this context the unmarked 3rd person singular, is always present.

The two signs in question, T181 and T713b, are also both used in iconography to represent the moon. Most common are their occurrences in “skybands.” Its use on the Palenque sarcophagus of *Janaab’ Pakal* is shown in Figure 65c. On Piedras Negras Stela 3 as T683a, this sign is used to write the *hu* portion of the verb *huliiy*, in this case *uhliiy* illustrated in Figure 65b. What is more, the word for “moon” in the Ch’olan languages is *uh*.

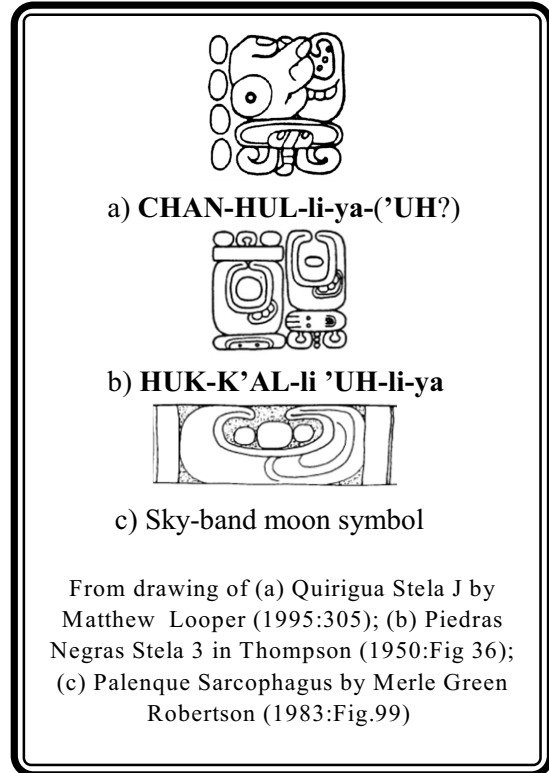


Figure 65. Signs similar to **ja** (T181) with different values or writing different words

The second relevant factor is that seeing the image of a rabbit on the moon's surface is a pan-Mesoamerican phenomenon that is in evidence in Classic Maya art and iconography as it is on the vase in Figure 66.

It is important to note that the T181 sign is most often used as a syllabogram with the value **ja**. However, it can also serve as a logogram with the value 'UH and in iconography to represent the moon as well. In practice it is occasionally indistinguishable in appearance. Mainly, the single circle that appears in the center of the upper part of the T683a sign is sometimes replaced by the three

smaller circles that usually appear in T181 and T683b. However, in the Tablet of the 96 Glyphs passage, there is no indication of any sort that the sign itself is meant to be read as *uh* nor that it refers linguistically to the moon. There is surely no indication that the sign is used functionally in the grammar of the verb for any other purpose than to join with **la** to write the *-laj* positional suffix. Other than embellishment, it is not apparent as to why in this particular case the scribe should add a representation of a rabbit in this particular sign when it is being used as a syllable. There may be some ulterior motive here for doing so, but the linguistic content of the passage itself does not reveal that motive. Although the motive here may be deeper than the reason one might have for adding a "smiley face" to the letter "O" in an English word such as "Hell☺," it seems certain that direct grammatical or lexical function can be securely ruled out. Perhaps a somewhat closer alphabetical analogy that relates to the origin of the sign itself might be enhancing the uppercase letter "A" by inserting a drawing of an ox head in its triangular upper part.

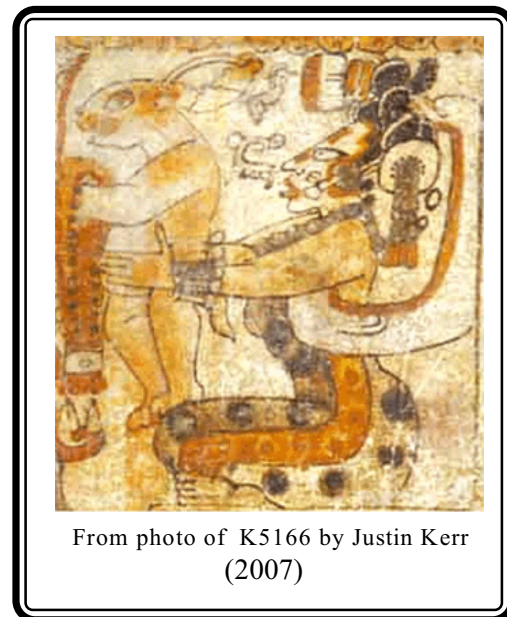


Figure 66. Iconographic representation of rabbit, moon Goddess and T181 as moon sign

Figure 67 shows a second example of what appears to be extra-linguistic embellishment, this time of a logogram, in an inscription originating in the area of El Cayo near the larger site of Piedras Negras. The person referred to most in the panel is a *sajal* whose name is *Chak Tok' Tuun Ahk Chamiiy*, “big flint stone turtle death(?)”

The monument repeats his full name several times just as in the Figure 67a example.

However, when the *sajal* is mentioned in a passage reporting a dance he performed with the ruler of Piedras Negras *Yo'nal Ahk*, his name appears with three knotted bands around the **CHAM** head logogram as in Figure 67b. Although one might argue that this is a different sign, that this is not the T736 logogram, and that it is not the verb form *chamiiy* that is being written here, such an hypothesis seems to be the least likely. The three tied bands are an extremely common element in Maya art and iconography and are usually connected with blood sacrifice of some sort. When not accompanying an actual depiction of bloodletting sacrifice or materials associated with bloodletting, they often appear to serve as a reminder of the past blood sacrifices undergone by the personage whose image they accompany. Considering the importance of this ceremony with his overlord, it is very possible that he performed bloodletting either as a part of the dance or as part of the ceremonies connected with this meeting. It is in that light then that I propose these bands tied around the death verb logogram are to be judged.

Also very important for this view is that the logogram serves as part of the *sajal*'s name. It is highly unlikely that the name of the *sajal* would be different in only this one occurrence out of a half-dozen on the monument. Instead, it is more likely that the *sajal*'s son, who followed him in reign, when commissioning this monument, had the three

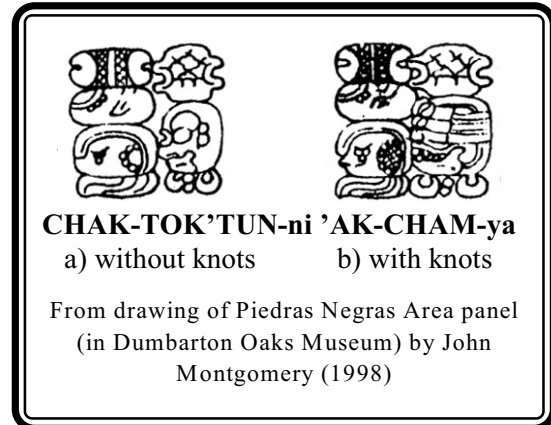


Figure 67. Extra-linguistic embellishment of a logogram

“bloodletting” bands added to the **CHAM** logogram as a reminder to the reader of the fidelity to the duty of blood sacrifice paid by his predecessor.

2.2.10 Syllabograms and Meaning

Generally speaking, as has already been noted, most Classic Maya word roots have the shape CVC, with the additional proviso of VC if one does not count an initial glottal stop as a consonant. Because of possible borrowing from other languages and incorporation of what in most lexemes are otherwise affixes, some word roots or stems take the shape CVCVC. Only a few exceptions such as the prepositions *ti* and *ta* along with occasional loss of weak consonants such as glottal stop /ʔ/ and glottal /h/ and velar /j/ allow certain words or particles such as *aj* and *bʼaah* to be written at times with a single syllabogram as *a* and *bʼa*.

Without taking into account any specific analytic breakdown of affixes and enclitics in the Classic Chʼolan texts, the surface shape of most of the suffixes and enclitics is VC, that of prefixes and proclitics CV, again with a proviso for non-consonantal interpretation of glottal stops and/or glottal /h/ʼs. There are several suffixes of the shape CVC, but most of them are also written using two syllabograms rather than one logogram. Even those attested as having been written with logograms as noted in Section 2.2.8.7.4 above, are also at times written with CV syllabograms. What is more, we have already seen that logograms used to write those suffixes have a pictorial content that, other than phonetically, is not at all connected with the suffixes they write.

Of course, the evidence that has already been presented concerning the use of logograms, provides an argument against placing the locus of discursive meaning within logograms themselves rather than in the words that logograms are used to write. That epigraphers in a post-Knorozov milieu of phoneticism would attempt to search for meaning in syllabograms themselves rather than in what syllabograms are used to write seems incongruous. While not at all in agreement with such attempts or approaches, I find it understandable how certain facts coupled with some basic misconceptions

concerning the concept of “meaning” in writing systems could lead to such a judgment. I will attempt to explain how such a view developed, to examine the data upon which it rests, to summarize the most current version of this viewpoint, to provide specific evidence against such an approach, and finally to argue that it too rests upon a misplacement of the locus of discursive meaning in writing systems.

2.2.10.1 Thompson: ‘u Sign as 3rd Singular Ergative Pronoun

J. Eric S. Thompson (1950:40) speaks of “translating glyphs into spoken Maya.” The view that the written language has to be translated into the spoken language highlights a basic misunderstanding of the Maya hieroglyphic script. Instead of viewing it as a writing system that records a language, he views it as a separate language that has to be translated into one that could be spoken or, as he seems to have implied, before it could be read aloud. On the one hand, he provides evidence from de Landa that T1 “corresponds to the sound *u*.” But then he writes that both T1 and T181 (Figure 68a-b) “stand for the possessive *u*.” But if a glyph corresponds to the sound /u/, why would one have to translate it to get to the spoken language? Why couldn’t one just read it?

The problem stems partly from Thompson’s identification of T1 and T181. One of them, T1, “stands for the possessive *u*” and the other, T181, is the “moon sign” *u* which as a rebus can “be read as the possessive *u*.” (Thompson 1950:47).⁶⁹ The important point here for our purposes is not his mistaken identification of the second of the two signs. Instead, more important is his failure to move beyond

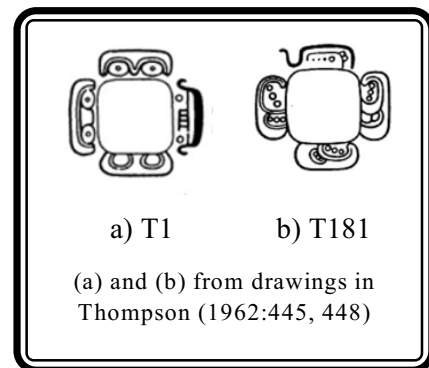


Figure 68. Thompson’s *u* signs

⁶⁹It seems indicative of his approach to the signs of the writing system that Thompson uses “stands for” instead of “writes” or a similar verb in referring to the T1 sign here. This would be similar to stating that the letters *i*, *t*, and *s* “stand for” a 3rd person possessive pronoun in English rather than “write” it. Although it may be possible to view the English writing system in that way, it appears somewhat strange to do so.

his statement that Landa's **u** "corresponds to the sound *u*" to the more accurate statement that Landa's '**u** is how the sound /u/ is written. Instead Thompson (1950:46-47) takes a step backward and states that it, out of context, is an "affix meaning 'of'" and that there are "cases in which the moon glyph is used as the possessive." His underlying problem and the true source of his confusion is equating a syllabogram with a particular morpheme, in this case a particular dependent pronominal prefix.

Of course, Thompson did not accept Knorozov's view of phoneticism which led to a distinction between syllabograms and logograms, so his confusion between a syllabogram and a single-syllable morpheme is understandable. Knorozov himself did not, at least in translation, use the terms "syllabogram" and "logogram." In the translation of his *Writing of the Maya Indians* (Knorozov 1967:35-37), Sophie Coe translates his terms as "phonetic" to describe syllabograms and "morphemic" to describe logograms and therefore refers to the overall system as "morphemo-syllabic." The problem with this terminology is that many syllabic signs in practical use can serve to write morphemes. Sometimes these syllabic signs can serve alone to write morphemes. Because Knorozov defined syllabograms as phonetic and non-morphemic while opposing them to morphemic signs, he laid the seeds for an interpretation of syllabic signs that is still argued by some up to the present day. Consciously or not, acceptance of his method of framing of what are here called "syllabograms" and "logograms" has led to continued attempts to also assign specific morphemic values to the same signs that are otherwise analyzed as syllabograms. For that reason, such interpretations have persisted despite the otherwise near universal acceptance of the existence of syllabograms as "phonetic" signs.

2.2.10.2 CV Syllabograms Doubling as VC "Grammatical Logograms"

James Fox and John Justeson (1984a) suggested that several signs had multiple values and used the term "polyvalent" to describe this characteristic. In addition to a syllabic CV value, they argued for logographic VC values for many of the same signs. These VC signs were really quite different from the usual CVC logograms. The value of

CVC logograms was related to actual words or word roots and was also often related in some way to what it depicted. Fox and Justeson (1984b:363), at the time, distinguished “phonetic” or “purely phonetic” signs (“syllabograms” in the terminology being used here) from logograms as “signs which have phonetic implications only via the word(s) they represent.” Yet despite this, they applied the convention for writing logograms to signs which did not “represent” words or even word roots, but which, as polyvalent signs, “represented” instead morphemic affixes and had “grammatical values” (cf. Matthews and Justeson 1984:226) or were “grammatical suffixes” (Justeson 1984:345, *passim*). While they made no separate mention of this type of sign in their article on transliteration conventions (Fox and Justeson 1984b:363-366), the same conventions were followed by writing such putative logograms in bold uppercase letters. Examples of this proposed type of sign, all of which had CV counterparts, are shown in Figure 69a-d.

What is common to all of these alternate VC logographic values as assigned by Fox and Justeson is that they are said to serve as inflectional and other grammatical suffixes. What is more, it is because these glyphs themselves serve as grammatical affixes that they classify them as logograms.⁷⁰ This represents a broadening of the term “logographic” and corresponds with the term “morphemic” as used in the Knorozov translation in place of a term such as “logographic.” It also reflects a tendency to speak about and interpret the glyphic signs themselves, even syllabic signs, as operating on the

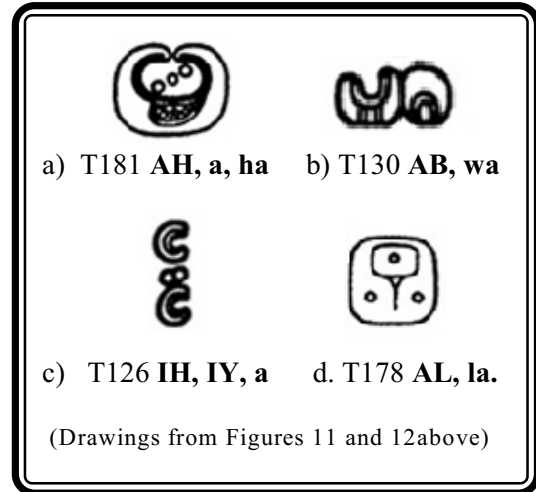


Figure 69. Some signs supposedly polyvalent because of alternate “grammatical values”

⁷⁰For example, they state “T47 is also the sign of a common verbal suffix” (Fox and Justeson 1984a:57), “T126 also functions as a suffix to verbs in the inscriptions” (Fox and Justeson 1984a:60), and “T130 frequently seems to represent a verbal suffix in the codices” (Fox and Justeson 1984a:67).

level of grammatical meaning even before being read. What is more, since the signs are polyvalent, it seems to require the reader to change the value and even the character of the signs themselves depending upon the meaning of the words and sentences. But this would require the reader to engage in continuous circular reasoning in order to arrive at the intended message, never knowing, for example, whether a specific sign is the phonetic syllable **ja** or the grammatical affix **AJ**. The levels of phonetic equivalence and semantic interpretation would be insufficiently separated to allow for easy understanding.

2.2.10.3 “Morphosyllables”: “Grammatical Logograms” Revisited

This tendency toward assigning multiple values to syllabic glyphs reached its apex more recently in an essay by Stephen Houston, John Robertson, and David Stuart (Houston et al. 2001a). At this point, there was much more in-depth knowledge and wider agreement as to the syllabic values of many of the syllabograms in question. As a result, the interpretation of the individual syllables in question was more accurate. Nevertheless, there are also many similarities between this later theory of “morphosyllables” and the earlier theory of “grammatical logograms.” According to Houston et al. (2001a:15), this third type of sign is “the morphosyllable, which has some properties of its sister glyphs. . . . They are at once logographic (semantic) signs and syllabic (phonetic) signs.”

Of course, considering what has already been argued in detail above, distinguishing between logograms and syllabograms by calling the former “semantic” and the latter “phonetic” is quite misleading. Both types of signs are phonetic and that is what makes the Classic-Maya writing system so accurate and flexible at the same time. However, the more important point in the present context is that Houston et al. intend to introduce “meaning” directly into decontextualized syllables as well. Unlike logographic signs, which typically refer to words with lexical meaning, morphosyllables refer only to morphemes with grammatical meaning. Such morphemes are inflectional or derivational (Houston et al. 2001a:15).

As shown in Figure 70, Houston et al. (2001a:16) further divide “morphosyllables” into two sets, “regular” and “irregular.” “Regular “morphemes are vowel-harmonic, the form being determined by the root vowel.” They continue, “the shape of the vowel is phonologically determined.” As examples, they

Regular Morphosyllables:		
-WA	(-V ₁ w)	“CVC transitive, declarative mood”
-YI	(-V ₁ y)	“CVC medio-passive”
Irregular Morphosyllables:		
-IL	(-Vl)	“-ness” (e.g., goodness)
-IB’	(-Vb’)	“instrumental”
-IS	(-Vs)	“nominalizer”
Invariant Vowel (Possible Separate Class):		
-AJ	(-aj)	“passive”
-IJ		

Figure 70. Proposed “regular” and “irregular morphosyllables”

offer among others, “**U-CHOK-WA** (*u-chok-ow*), ‘he scatters it’” and “**PUL-YI** (*pul-uy*), ‘it burns.’”⁷¹ In other words, they designate these as regular because the vowel to be used is the vowel of the verb root. These suffixes are vowel harmonic with the vowel changing regularly. In what seems to be an unusual tactic, they do not write these regular morphosyllables as -V₁W and -V₁Y or even -VW and -VY but as **-WA** and **-YI** instead.

Their “irregular morphosyllables” as shown in Figure 70 are “all derivational.” For these morphosyllables, “the shape of the vowel is unpredictably given by the particular word with which it co-occurs.” They are morphosyllables for which one cannot predict the vowel. Unlike the regular morphosyllables, these are written in the form VC, for example, as **-IL**, **-IB’**, and **-IS**.

Finally they hint at a third class for which the vowels are not changeable. These would include **-AJ** and **-IJ**. The former, **-AJ**, was also first listed under “irregular morphosyllables and “represents” the “passive” (Houston et al. 2001:17). They do not

⁷¹Note that although Houston et al. do not explicitly include **U** as a morphosyllable in this list and do not discuss it at all in their article, they indicate that it is a “morphosyllable” by transliterating (their “transcribing”) it into upper case in thirty-three out of thirty-eight times (87%). However, they never transliterate its pre-vocalic (pre-glottal-consonant) dependent pronoun counterpart, written with a yV syllable, into upper case.

state in this article what the morphosyllable **-IJ** “represents” although they do provide some ideas about it in a later article (cf. Robertson et al. 2004:283-287).

In general, Houston et al. 2001a:15) note the following characteristics concerning “morphosyllables:”

Unlike syllabic signs, morphosyllables both underspecify and overspecify the phonological content of the morphemes they reference. They underspecify since their spoken counterparts are suffixes, taking the form VC (not CV), the vowel being unwritten and variable. A knowledgeable reader must not only fill in a vowel, but supply one that is appropriate to the given environment.

Morphosyllables overspecify the nature of the spoken morpheme, since its written form is CV, the final vowel not being pronounced. . . . They further underspecify by suspending disharmony (Houston et al. 1998), although syllabic elements immediately preceding them can involve disharmonic spellings. . . .

Comparison of “Grammatical Logogram” and “Morphosyllable” Theories			
“Grammatical Logograms” Fox and Justeson (1984a-b)			“Morphosyllables” Houston et al. (2001a)
Assigned Value (V = “vowel”)	Syllabic Value	T-Number.	Assigned Value (V = “vowel”)
b’i, b’e	b’i	T585	-IB’
-AH	ja	T181	-AJ
-VN	ji	T88, T136	-IJ
-AL	la	T178, T534	-AL and -al
-EL	le	T188	-EL and -el
-IL or -VL	li	T2, T82, T83, etc.	-IL or -VL
lu but OL/UL in origin	lu	T568	-ul
-VS	si	T57	-IS
U	’u	T1, T2, etc	U
-VB’ or -AB’ (Fox: later =) -VW or -AW	wa	T130	-WA ($-V_lw$)
-IY or -IH	ya	T126	ya ($-i:y$) (“uncertain”)
(not deciphered)	yi	T17a,b, T18	-YI ($-V_ly$)

Figure 71. Comparison of two theories that propose grammatical values for syllabograms

2.2.10.4 Comparison of “Grammatical Logogram” and “Morphosyllable” Theories

Fundamentally, and even in most of its details, the theory of morphosyllables is based upon the same approach as that taken by Fox and Justeson seventeen years

earlier.⁷² While they assigned two different values to syllabograms, one syllabic and one logographic to create a theory based upon polyvalency, Houston et al. (2001) call the second sign type a morphosyllable and name their theory after that category. There is, however, essentially no difference between the logographic versions in the one theory and the morphosyllabic versions in the other even down to the chosen method of writing them. Figure 71 shows a chart comparing values assigned to the signs, either explicitly discussed or in actual transliterations used in Houston et al.'s essay. Most of them had been assigned the same or similar values by Fox and Justeson based upon "grammatical meaning" just as Houston et al. have done. The syllable **b'i** was not so classified by Fox and Justeson but is included by Houston et al. As to T126, Houston et al. (2001a:50) note: "We are unsure whether to include **ya** in the list of morphosyllables. It is neither inflectional or derivational."

Probably because the T17/T18 **yi** decipherment was published by David Stuart (1987:25) three years after the publication of Fox and Justeson's account, it was not included in their earlier list. Fox and Justeson's list does include **IV** syllabograms other than **li**, partly because they do consider them to be separate VC logograms in their system. However, although Houston et al. also classify all **IV** syllabograms under one rubric, both the data and the transliterations in Houston et al., at least of **la** and **le**, vary, as do the explanations they provide for them.⁷³

⁷²This work of Fox and Justeson (1984a:17-76) and their assignment of either the same values or values commensurate with the progress of decipherment at the time (cf. Justeson 1984b:315-362) is never referenced or mentioned in Houston et al.'s essay.

⁷³The value **-EL** is provided twice for **le** but is also given the value **le** once in a similar situation (**u-b'a/ke-le/B'ALAM-ma** versus **B'A:K-EL/WAY-AL** (Houston et al. 2001a:31). It is possible that these are intended to involve different situations, the first with meaning and the second without. However, early on in the article, Houston et al. (2001a:9-10) stress how the **meaning** changes to show innate possession when the suffix is **-el**. Other differences may simply be proof-reading errors since two examples of **li** used to write **-il** suffixes are also given the syllabic value **li**. However, the occurrence of the **la** sign for writing **-al** is only given the value **-AL** once but the value **la** seventeen times! In a footnote they mention that there may be one example of **la** acting as an **-AL** morphosyllable in **pi-tzi-la** although in the text they offer only the option **-al**, that is, a VC syllable rather than a morphosyllable or a CV syllable. But in the example **WAY-AL**, they directly transliterate **la** as **-AL** with no further explanation. Interpreting this all in the best possible light, it seems that they intend to favor mostly the assignment of the morphosyllabic value

(continued...)

2.2.10.5 General Problems with Theory of Morphosyllables

Several preliminary comments are important to make here. First, Houston et al.'s definition of what morphosyllables are matches precisely what Fox and Justeson (1984) called logograms with "grammatical values." Both theories assign grammatical meaning or function to what are otherwise syllabic signs which supposedly makes them something other than syllabograms, whether they are called "grammatical logograms" or "morphosyllables."

Second, this whole approach betrays a conflation of linguistic levels that makes it difficult, if not impossible, to understand how writing systems work. According to the perspective I have offered, at the most basic level, writing systems are not language. Instead, writing systems **record** language. Meaning does not reside in the characters used to write words, whether letters, syllabograms, or logograms, but rather in the language that is being recorded, that is, in the morphemes, words, sentences, and passages that are being written.

Third, Houston et al.'s use of terminology in the quotes just presented rules out **a priori** an assignment of meaning at a level that will allow for an adequate description of how the signs of the Classic Maya writing system function and indeed how the whole system operates. They state that "logographic signs . . . **refer** to words with lexical meaning." They describe "morphosyllables" as if they "**reference**" morphemes (emphasis added). As argued several times above, logographic signs do **not refer** to words. Instead, logograms **write** words and a few affixes, all of which are morphemes. They also state that "morphosyllables **refer** only to morphemes with grammatical

⁷³(...continued)

-IL to **li** syllables. But they also argue that the transcription (their "transliteration") of this **-IL** morphosyllable is **-Vl** meaning that the intended vowel can be any of the five (cf. Houston et al. 2001:17). This accounts for its designation as "irregular." What seems quite unusual in light of this explanation is that all of their own transcriptions (which are given in italics and which they call "transliterations") of **li** signs, their **-IL** morphosyllables, result in actual **-il** suffixes. Despite all this and their insistence that the morphosyllable is actually **-IL** in all these cases but can be "transliterated with any of the vowels as **-Vl**" (Houston et al. 2001:17), they nevertheless write **-AL** and **-EL** only when the final syllabograms are **la** or **le**.

meaning.” Again, it is extremely important to note that syllabic signs do **not refer** to morphemes. However, they can be used to **write** morphemes. Sometimes an individual syllabogram can write a morpheme on its own and sometimes two or more can be combined to write morphemes. Even many of the very same morphemes can be and are written sometimes with one syllabic sign and sometimes with two. None of these signs, whether logographic or syllabic, are morphemes, grammatical or not, on the level of system signs. What is more, they are used to write morphemes of all kinds but they do not “reference” them.

In sum, both logograms and syllabograms can and do write morphemes. However because of the nature of words and especially word roots in Classic Ch’olan, **most, but not all**, word roots require either a logogram (CVC) or at least two syllabograms (CV) to write them. In either case, the meaning resides in the word written, and not in the sign or signs that write them. Because of the nature of affixes and clitics in Classic Ch’olan, **most, but not all**, affixes and clitics require one or more syllabograms to be written. But the grammatical and non-grammatical meaning of these affixes and clitics resides in the affixes or clitics written and not in the sign or signs used to write them.

2.2.10.6 Problems with Application of Morphosyllable Theory to English Writing System

Since the authors also identify morphosyllables in written English with meaning resting in the alphabetic characters rather than in the affixes they actually write, it seems appropriate to examine just how their logic might work in a similar analysis of the proposed morphosyllables of the English writing system. The one they specifically mention for English is **-ED**, which they however write as “-ed” (cf. Houston et al. 200a1:21). So, although there are many uses of the morphosyllable **-ED**, the most common seems to be as a past tense inflectional suffix. Paraphrasing using parts of a quote from Houston et al.’s comments on one of their morphosyllables **-IB’** (provided in original form below) one might say “The sign [**-ED**] can certainly function as [the letters

e and d, but they] mostly mark [regular past tense].” So **-ED** surely must be a morphosyllable with embedded meaning. Therefore, besides letters, and logically prior to them, we must allow for these meaning-filled morphosyllables to be basic parts of the English writing system. I believe that when one takes their line of argument to its logical conclusion it is easy to see that it not only causes confusion, but is itself confused as to the level at which meaning enters into the structure of any alphabetic or logosyllabic writing system.

Perhaps, instead of paraphrasing from what Houston et al. write about the Classic Maya writing system, it may be best to review precisely what they have written about “-ed” in the English writing system.

The English suffix “-ed” is a morphosyllable because (1) it has meaning, (2) it is a spelling, and (3) it presupposes knowledge beyond what “-ed” spells: voiceless “t” in “tacked”; voiced “d” in “tagged; and schwa + voiced “d” in “tatted.” (Houston et al. 2001a: 21)

First, to comment on Houston et al.’s point number (1), “-ed,” as a way to write an American English suffix, emphatically **does not** have meaning in itself. It is nothing more than the accepted way to write alphabetically a part of a word. Meaning and understanding come as a concomitant of the fact that in context what is written is an inflectional suffix. This particular series of letters can also write other things. It is on the level of actual language, not on the level of letters, letter combinations, or the script itself that it has meaning.

As to their point number (3), that it presupposes knowledge beyond what “-ed” spells, that is really not the issue here. The examples they present address **phonetic** knowledge, **not morphemic** knowledge. As has already been mentioned a number of times, in order to use a writing system, one must at least learn both the basic characters, in English these are the sounds of the alphabet and, most relevant for this example, the

phonetic variants they can write. Learning the phonetic variants of what is written is especially important and indeed very difficult in the English system. However, learning how to read “-ed” as “t” or “d” is not the same as learning the grammatical forms. It involves being able to equate what one is reading to lexemes that one hears and speaks. To become literate, one must learn enough of the basics to be able to equate the written language with the spoken language or with the language as one experiences it.

There is, then, no dispute between us concerning, for example, that the syllable **wa** can be used in the Classic Ch’olan script to write $-V_1'w$ (cf. Wald 1994a). The point is to write a particular word including its suffixes. That in some word contexts the spoken word would have a slightly altered sound does not thereby convey a characteristic upon the actual written form of the suffix. It simply means that the particular writing system does not have a different way of spelling this suffix on each word just because there are different phonetically determined ways of pronouncing a particular morpheme or lexeme.

Only a completely phonetically based system would write everything precisely as spoken. What is more, such a script would then only be appropriate in a limited area because of different pronunciations of the same words in different places. Spellings in English have at various times been driven both by attempts to approximate the spoken word and by convention and compromise when exactitude was not possible because of the limited sign system and by variation in actual pronunciation among different groups. What is more, changes over time in both the spoken language and in some writing conventions also had an effect. That does not change the letter series “-ed” into a morphosyllable which has meaning. Instead, it requires the reader, should she or he wish to read aloud, for example, to simply understand that these letters, along with the letters writing the root, comprise a way of writing a specific word whose pronunciation, more or less accurately, matches what is written with letters.

In the case of historical sound changes in particular words or groups of words, the spelling in English has not changed to match the changes in pronunciation. But that is

also not to be seen as indicating particular morphosyllables are at work, but simply that the particular letters used to spell them have not changed with the changes in pronunciation. None of this should be taken as proving the presence of morphosyllables in English, but simply as the lack of interest in or authority for modifying the spelling rules to match the historical changes.

It is, of course, true that the way certain words are presented or spelled in a writing system can sometimes reveal more about which specific word is meant than would be revealed by the phonemes actually used when speaking. A classic example in English are the words “to,” “too,” and “two,” which in most English speaking areas are pronounced exactly the same. This can and does sometimes cause problems among listeners to actual speech that can only be overcome by repetition, gesture, context, or special inflection, for example, “I **want** to” versus “I want **two**.” For lexemes such as these, the written word contains information, in this case historical information, that is no longer present in the spoken word. For example, in the English spelling of the number “two,” a form closer to Old English *twa* and Indo-European **dwo-* still survives (cf. *American Heritage Dictionary, Fourth Edition*, Pickett et al. 2000). The root is reflected in other English words such as “**dual**,” “**twain**,” and the number “**twelve**.” It is quite clear, then, that the spelling rests upon its pronunciation at a specific historical time and not upon any deliberate attempt to distinguish in the writing system what can no longer be distinguished in the speech of most native English speakers.

Such accidental aids in the English writing system are unfortunately far outnumbered by examples for which the preserved historical information has made reading much more difficult. In any case, none of this added information has anything to do with the existence of meaning in the employed signs rather than in the words actually written. The script may clarify which words are intended, but the signs used to write the words do not normally encompass meaning in themselves that is not present in the actual language and they surely do not represent morphosyllables that have meaning separate from or independent of the words or affixes being written.

If one were to follow the reasoning and criteria presented by Houston et al., then “-s” would also be a “morphosyllable.” It would have grammatical meaning, for example, “plural.” It also has to be pronounced differently depending upon phonological context, for example, /s/ and /z/, and /es/ as in “cats” and “news” and “houses.” But to say that this is inherent in the letter or “morphosyllable” “s” or “es” rather than in the pronunciation of the word in its phonological context would be quite misleading. What is more, it is convention to spell the plural of some words with “-es” instead of just “-s” to actually reflect the way it is pronounced while this is not usually done to distinguish /s/ from /z/. None of these facts requires one to place meaning in the letter “s” or the letter string “es.”

2.2.10.7 Further Contentions of Morphosyllable Theory

The unsuitability of the views that treat syllabograms as morphemic signs can be illustrated by comparing the example of writing the “-s” plural in English and writing the *-ib* instrumental in Classic Ch’olan. Houston et al. have this to say about T585 **b’i** although they refer to it by the value they give it instead:

The sign **-IB’** can certainly function as a syllabic **b’i**, but, to an overwhelming extent, it mostly marks instrumental constructions, and that is likely to have been its more ancient use. (Houston et al. 2001a:22-23)⁷⁴

⁷⁴Note that Houston et al. refer to the glyph as **-IB’** rather than assigning it that value. In this study and others, for example, Fox and Justeson (1984b), **IB’** and **b’i** would be referred to as transliterations of the glyph. According to Crystal (1992:395), “transliteration” means: “Each character of the source language is given an equivalent character in the target language.” So although the glyphic signs are not “letters,” they are “characters,” making the term “transliteration” clearly applicable to this process even though one character in the Maya script may equal more than one letter in the modern ALMG Maya alphabet. Houston et al. have in effect eliminated a level of representation that clearly must be there for correct interpretation of the glyphic signs. This terminology, in effect, moves the assignment of meaning up one level to the glyphs themselves. With no difference at all in appearance they have effectively assigned multiple readings to a number of glyphs, even some that they do not mention in their essay. Syllabograms now not only have to be identified as to value but also as to grammatical meaning even **before they are read in context.**

(continued...)

They give the sign itself the value **-IB'** and make its function as **b'i** secondary. For them, the grammatical meaning becomes the primary consideration and origin of the sign. That is why they also speak of syllabic signs (syllabograms) actually originating as morphosyllables after which “they necessarily passed through a process in which meaning was completely stripped from the sign” (Houston et al. 2001a:20). According to them, instead of logograms and syllabograms used to write whole words with all their affixes, morphosyllables wrote affixes and these morphosyllables later also came to be used as syllabograms. In sum, they contend that grammatical meaning was the basis of the syllabographic portion of the system.

The Maya writing system does indeed share characteristics with other writing systems, but one of them is not the widespread use of morphosyllables. Like them, it does not normally exhibit what are purportedly basic syllabic or alphabetic elements of the system which have meaning in themselves independent of the words and suffixes they are intended to write. Instead, it shares with them characteristics such as adopted conventions that often serve to simplify writing the words, word roots, and affixes of the language as well as preserved historical forms that sometimes complicate the system. Just as letter combinations in alphabetic systems are meant to be read and to produce meaning in the context of words, phrases, and sentences, and not as morphemic signs in themselves, so too are logograms and syllabograms meant to be read for meaning in the same way. The specific glyphs are not themselves the morphemes, but rather the means of writing them. The Maya hieroglyphic script is not a code consisting of signs that ooze meaning independently, but is rather a system that allowed the scribes to record, in a conventional way, words, phrases, sentences, and texts in their language. It is at that level, the level of the written message, that the primary meaning should be sought. The

⁷⁴(...continued)

Note also that my usage also follows Crystal's (1992:395) definition of “transcription” according to which “...the *sounds* of the source word are conveyed by letters in the target language.” At that level, which is one step below that of transliteration, the **words** are presented in the alphabetic script as they would be written if the modern alphabet were used. So, for example, the transliteration **pa-ka-la** would be transcribed as *pakal*, since the **a** of the final syllable does not write a vowel that is meant to be pronounced.

words chosen and even the various forms of the verbs, nouns, and other morphemes are very important for understanding all the connotations of that message. However, the individual signs themselves do not come imbued with grammatical meaning.

2.2.10.8 Issues Raised by Treatment of Some Dependent Pronouns as Morphosyllables and Grammatical Logograms

Besides the more profound theoretical reasons why the theories of morphemic signs and morphosyllables in their various incarnations are not accepted as valid here, several, more practical, reasons make such approaches suspect. An important one is that some CV syllables are written using several different syllabograms. The most common example involves the varied

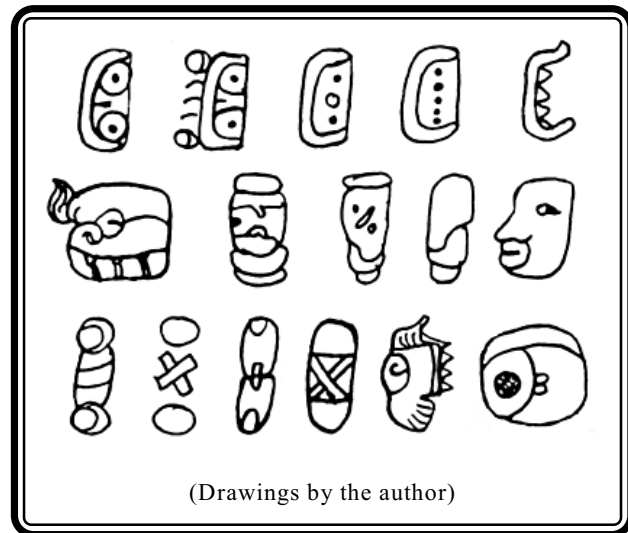


Figure 72. Some of the many syllabic 'u' signs

syllabograms used to write *u*. In its use as a possessive and ergative pronoun, T1 'u' was considered a logogram by Fox and Justeson (1984b:316). Of course, as a prefix, *u-* is not a word nor an independent morpheme. As already mentioned earlier, it is also given the value and transliteration **U** by Houston et al. 87% of the time indicating that they identify it as a morphosyllable although they do not discuss it specifically in their 2001 article.

Some of the various forms of 'u' signs are shown in Figure 72. But if this glyph is a specific logogram or a "morphosyllable" which has grammatical meaning in itself as opposed to a syllabic value, the question arises as to why a specific sign or group of signs would not be reserved for such grammatical usage and others for so-called "purely phonetic" usage. Since they are not, of what value is a sign-level analysis stating that they all are members of two separate but completely identical groups? An analysis as to

whether an ergative pronoun is present can only come after the signs and sometimes even the words, phrases, and sentences are viewed or read in their linguistic and discursive context. At the glyphic level, they all represent the same syllabic value 'u. Distinguishing at that level the specific grammatical role of the syllables, clitics, affixes, word roots, or words each of them might write involves making a premature decision. Input that is necessary to make an informed choice is still lacking.

Deciding upon meaning at the wrong level, however, represents only half of the problem that comes from giving logographic or morphosyllabic values to what are otherwise syllabic signs. If one assigns the morphosyllabic value 'U, thereby indicating the meaning "3rd person singular ergative dependent pronominal prefix," what then would one need to follow the same procedure and logic in assigning values to the syllables **ya**, **ye**, **yi**,

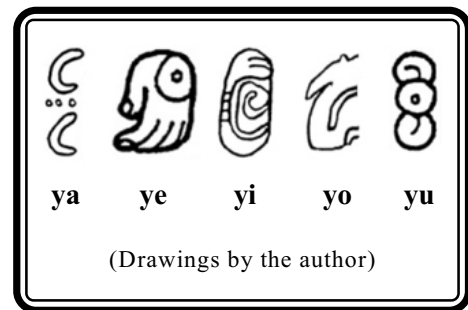


Figure 73. Some syllabograms used to write the 3rd person singular dependent pronoun preceding glottal /h/ and glottal stop /ʔ/

yo, and **yu** shown in Figure 73? After all, each one is used in the appropriate contexts to write the 3rd person singular ergative dependent pronominal prefix when preceding a word which otherwise begins in a glottal *h* or glottal stop. Only the consonant in each of these syllables writes the phoneme /y/ which is indeed the pronoun needed in such cases. There seem to be two possibilities here. One is to conclude that each of these syllables represents a morphosyllable. Thus, one should consequently transliterate them as morphosyllables, **YA**, **YE**, and so on. However, this could hardly be correct since the vowel in each case is simply the first vowel of the following stem and is not part of the prefix *y-*. Perhaps, instead, one should be consequent and treat both forms of the pronominal proclitic the same way. Thus, the transliteration should be **Ya**, **Ye**, and so on, that is, using upper-case letters for the actual proclitic and lower-case for the vowel of the stem. After all, for **U-b'a-hi** *ub'aah* they write the prefix in upper case while the first phoneme of the stem is transliterated as lower case. In this case, whether one calls them

“logograms” (Fox and Justeson 1984b) or “morphosyllables” (Houston et al. 2001a), a grammatical analysis would accept this designation for only half of the syllabic sign.

In actual fact, Houston et al. (2001a:27,29) transliterate all of them as syllabic as in “**ye-b’u-IL**” and “**yu-UH-IL.**” They never transliterate the **y** that writes the ergative pronoun *y-* in upper case as they say befits a morphosyllable. What is more, they never address the reason why they treat the signs used to write the 3rd singular dependent pronoun prefix preceding consonants as morphosyllables but at the same time treat the signs writing the 3rd singular dependent pronoun prefix preceding vowels completely as syllabograms. It seems that theoretical anomalies and inconsistencies such as these provide enough evidence that this particular analytical approach based upon so-called “morphosyllables” is unable to accommodate or account for the way syllabic signs are actually used in practice.

2.2.10.9 Issues Raised by Same Syllabogram Writing Different Grammatical Suffixes

The practical difficulties raised by designating syllabic signs as morphemic or morphosyllabic do not stop with the dependent pronouns. Several of the signs designated as such by Houston et al. are undoubtedly used in different contexts to write different grammatical suffixes. One of their “regular morphosyllables” **-WA** is assigned the “meaning” “CVC transitives, declarative mood” (Houston

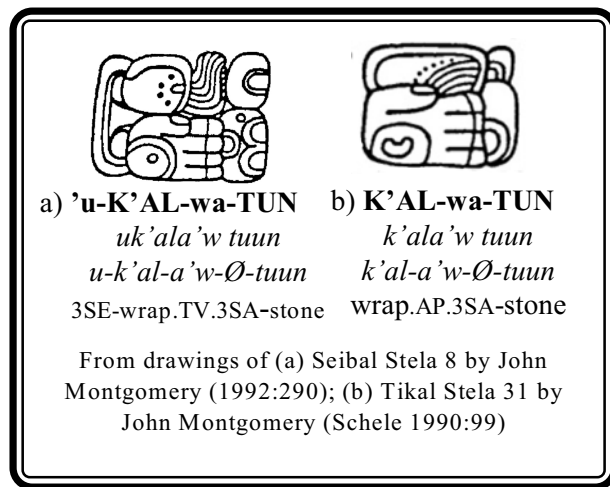


Figure 74. Syllabic sign **wa** used to write different morphemes

et al. 2001:16). But it is precisely the same syllabogram that is also used to write *-V'w* or *-V_I'w* antipassives as the example in Figure 74 demonstrates.⁷⁵

A similar but even more complex problem arises with what they designate to be the **-AJ** “irregular morphosyllable” which they state has the meaning “passive.” Even though these same authors themselves reject the view that the *-aj* suffix is a thematic suffix or intransitive marker (cf. Kaufman and Norman 1984:108; Lacadena 2004), they do note elsewhere (Robertson et al. 2000a:330) that the passive marker is made up of both an infixed *h* and an *-aj* suffix. It alone can hardly be dubbed “passive.” In fact, although apparently a view not shared by Robertson et al. as a valid analysis for “Ch’olti’an,” others would agree that the infixed /h/ is the most important element of the passive form of root transitives in Ch’olti’, Ch’orti’ and Ch’ol (with a few exceptions). Nevertheless, the infixed *h* along with the *-aj* suffix has long been recognized as the form used for root passive constructions in the Classic-Period texts (cf. MacLeod 1984:254; Lacadena [1997] 2004).

The problem for the morphosyllable and grammatical-logogram theories is that **ja**, alone or with another syllable is also used to write several other grammatical morphemes. For example, it is used to write the *-aj* which they call an “absolutive morphosyllable **-AJ**” to mark “an ancient particle for indicating absolutive (unpossessed) objects” as they themselves have noted and have included as such in this same essay (Houston et al 2001:46).⁷⁶ Thus the seeming clarity as to what grammatical morpheme each morphosyllable “represents” in the first part of their essay and as indicated in Figure 70 above is already clouded by multiple meanings in its final pages.

⁷⁵Note that the antipassive form in Figure 74 could also be analyzed differently if it is indeed an object-incorporated antipassive: *k'al-a'w-tuun-Ø*, wrap-AP-3SA-stone-3SA

⁷⁶Note that the very important and welcome proposal concerning the use of this suffix in these contexts in the Classic period texts was made and announced by Houston, Robertson, and Stuart already in Stuart et al. (1999b:13-14) and earlier (pers. com. 1997).

There are several other morphemes that have the same shape but by no means the same meaning, and are likely not related at all, even historically. The *-aj* suffix is used to derive certain gerunds such as in the Cancuen example in Figure 75. Although *muhl* is reconstructed as a noun in Proto-Ch'olan by Kaufman and Norman (1984:126), evidence from Ch'orti' *mori* “scoop or gather up, gather together in piles” (Wisdom 1950:529-30), Ch'ol *mujlan* “cubrir (con arena, hojas, tierra, zacate)” “cover (with gravel, leaves, earth, hay)” (Aulie and Aulie 1998:77), and Chontal “*mul* /TV /to cover with earth” (Knowles 1984:441) indicates that, at the very least, it is also a transitive root *mul* “to pile, heap up.” In the case of the Cancuen Panel *umulaj*, it is a possessed nominal derived from the transitive verb *mul* by means of the suffix *-aj*, a variant of the *-oj/-ej* suffix attested as a nominalizer in Tzeltalan as noted below in Section 4.6.6. Thus the sentence illustrated could be translated as “It was circumambulated, the mound of the pyramid”.

Other cases in which the suffix *-aj* consists of two parts, an *-a* to derive a transitive verb from a noun and then a *-j* to derive an antipassive, as in *ochb'ihaj* “he road-entered” will be discussed in detail in Section 6.5.9.2.1. below. In cases such as this particular compound morpheme *-aj*, using the morphosyllabic theory, one would have to assign several quite different meanings to the individual parts of the so-called **-AJ** morphosyllable. This problem is similar to that which we have seen occur with the **yV** set of CV signs.

The sign T181 **ja** is one that Houston et al. do specifically include as a morphosyllable in their essay. Indeed, as noted above, they list it in this way “**-AJ** ‘passive’” (Houston et al. 2001a:16) Still, as we have just seen after reviewing some of the uses of the suffix *-aj* in Classic Ch'olan, although the syllable **ja** is also used in

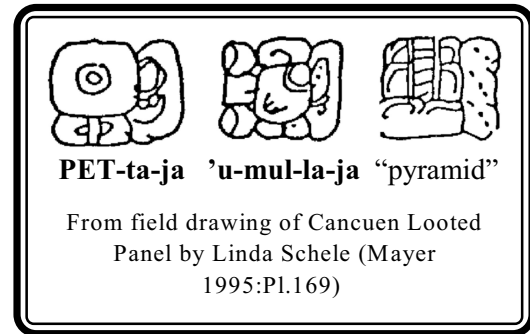


Figure 75. Syllabograms **la** and **ja** used to write suffix deriving a gerund

writing passives, sometimes alone and sometimes in conjunction with the vowel of the preceding syllable, it is also used in writing several different suffixes and compound suffixes, not just the thematic or intransitivizing suffix used with passives in *-hC-aj*. All these examples and more provide strong evidence that this whole morphosyllabic approach to the Classic-Period writing system is unsuitable for explaining the data. Indeed, within that theoretical system, there can be no clear judgement as to which meaning this supposed **-AJ** sign represents, since it, albeit as **ja** instead, is used in writing a whole group of unrelated suffixes and compound suffixes in *-aj*. One could not possibly detect any specific grammatical meaning merely based upon its presence without the context in which it appears. Thus, meaning could not possibly be legitimately assigned on the level of the syllables themselves. Indeed, what they do share and what they do indicate at that level is simply a phonetic identity or similarity, but not anything entailing a particular grammatical meaning at all. In context, *-aj* does indeed take on meaning, but this is at the level of the language itself, the transcription level, not at the level of glyphic signs or their transliteration.

2.2.10.10 Issues Raised by Syllabograms of Different Values Writing Same Grammatical Suffixes

Arguments against a grammatical interpretation of syllabograms rather than of the words and affixes they write is further strengthened by more examples of passive constructions in the Classic-Period texts such as those in Figure 76. Although T181 **ja** is used when writing basic passive verb constructions,

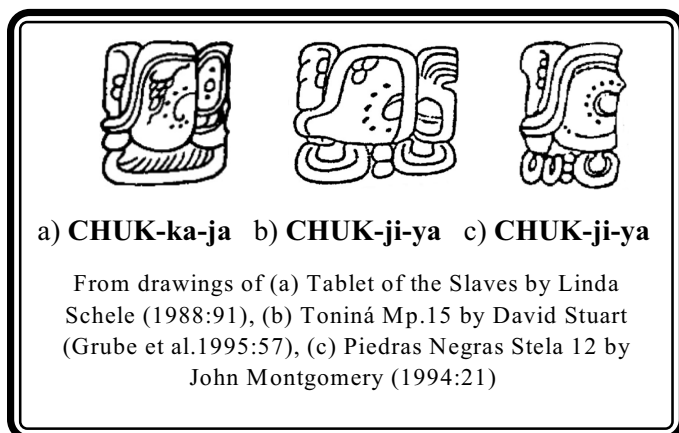


Figure 76. Last part of *-hC-(a)j* passive suffix written with **ja** and two **ji** syllabograms

the strategy changes when an additional morpheme is attached to them. As will be explained in great detail later in Section 6.3, the enclitic *-iiy*, “in the past, ago, back then,” is attached to many verb stems, including those in the passive mood, when there is a reference back to an earlier event. When this occurs, T181 **ja** (Figure 76a: *chuhkaj*) is supplanted by one of the **ji** syllabograms, usually T88 or T136 (Figure 76b and c respectively: *chuhkjiy*). This occurs whether the root is written with a logogram or with syllabograms.

When passive forms with this enclitic attached are written with a logogram, there is often no **a**-vowel written between the root and the **j** of the suffix, but, when written syllabically, there almost always is. It is not completely clear as to whether an *a* should be supplied by the reader when not explicitly written as in the case of logographically written roots, or dropped when it is included in the case of syllabically written roots. Many epigraphers exclude adding an *a* in the transcriptions in the logographic examples but include it in those written syllabically although it is not likely that both approaches could be right. What is important for the present purposes, however, is that, in these cases, it is almost always not the **ja** sign, that supposedly means “passive,” which is actually used to write the passive form. The **j** of the passive thematic or intransitive suffix comes instead from a **ji** sign. When the root is written syllabically, the **a** is still most often included in the **Ca** sign that writes the final consonant of the root. Rightfully, Houston et al. never state that this particular **ji** is also a morphosyllable that means “passive.” It does seem quite clear that using both **ja** and **ji** to write a supposed morphosyllable in **-AJ** would be hard to support within their theory. Creating a morphosyllable out of two different syllables, both of which also write part of another morpheme, as would be the case in these syllabic spellings, contains within itself the seeds for the destruction of the morphosyllable theory. Examples such as these which include the use of different syllabograms (in this case **ja** and **ji**) to signal a different phonetic reading (in this case one called for by the attached enclitic *-iiy*) help to

demonstrate that such syllabic signs indeed operate at a phonetic and not a grammatical level.

One could continue this argument with some of the other morphosyllables identified by Houston et al., especially with **-IL (li)** and **-IJ (ji)**, but the points to be made would be the same. Although they do not state it, one would logically have to expand their list since all of the other syllabic glyphs that are used in writing affixes would qualify as well. Taken to the extreme, many syllabograms could only occur as syllabograms in word roots or as phonetic complements. Many of the others, although they combine with other syllables to write the same morphological affixes, would not qualify since their consonantal and vowel components are used in writing different morphemes.

2.2.11 Concrete Issues Underlying Theories of “Grammatical Logograms” and “Morphosyllables”

For what important phenomena are these theories proposing morphemic values of syllabograms trying to account? Despite their emphasis on grammatical meaning, it is simply that certain syllabograms are used to write affixes and appendages of lexemes. These affixes and appendages sometimes serve grammatical purposes such as inflectional or derivational morphemes and sometimes they serve as clitics. But instead of locating the morphological and morphemic significance in the affixes that are being written, these theories locate it instead in the glyphs or signs themselves. They contend that, for example, the syllabogram T130 **wa** at the end of a verb somehow contains the meaning “transitive” or “transitive indicative.” I have presented arguments why this is not the case. Instead, the syllabogram for **wa** at the end of a verb indicates that its final syllable should normally be read as $-V_l'w$, with the vowel to be read being the same as the root vowel of the verb. Those espousing a grammatical logogram or morphosyllable theory may agree with that, but they also add that “**-WA**” itself contains the “meaning” “transitive indicative.” Instead, it simply writes, for example, the $-a'w$ of *uk'ala'w* or the

-a 'w of *k'ala'w* as in Figure 74 above. They fail to adequately justify how, if it indeed **means** “transitive” in Figure 74a, it could also **mean** “antipassive” in Figure 74b. This is evidence of a fatal flaw in those theories although it is not a significant problem at all on the level of an actual natural language even in its written form.

2.2.11.1 Writing-System Characters Primarily for Reading, Not Grammatical Analysis

As is the case with other writing systems, the characters employed in the Classic-Maya system are meant to be read. Their purpose is not to refer the reader to specific grammatical morphemes. They are meant to provide a way to read and write what is otherwise only spoken or heard. The words and other morphemes that are written are the source of grammatical and discursive meaning. These meanings do not reside in the letters, syllables, or logograms themselves. What is more, neither the writer nor the reader needs to be consciously aware of this grammatical meaning, just as neither the speaker and nor the listener needs to be consciously aware of this grammatical meaning. However, especially the writer, but also the reader, must learn the basic characters of the writing system, whether letters, syllabograms, or logograms. Both must learn how these basic characters are put together and what rules of thumb or strategies are used in writing and reading the written version of the language. Neither the reader nor the writer has to think “transitive” when writing or reading *uchoko'w*. But the writer must simply write and reader must simply read *uchoko'w* just as the speaker must pronounce and the listener must hear *uchoko'w* in order to easily and correctly understand what is being read or said.

In the case of the syllabogram T181 **ja**, this is even more apparent. It is used to write several different grammatical and thematic suffixes as has already been noted in great detail. One does not need to think “grammatical suffix” and then mentally tick off the possibilities in order to read and understand what is written. Instead, one needs only to know that when the **ja** sign appears in such a word final context, it is to be read as *-aj*. This is writing strategy and a reading rule, not a grammatical rule. When one then reads

or hears words such as *b'aahaj₂ tz'ahpaj*, or *umulaj*, in which *-aj* writes different grammatical morphemes, each lexeme and its meaning is recognized in its totality based upon its root, its affixes, its clitics, and its context. The writer and the reader must have learned the basics. They must know enough to write or read the spoken language equivalents of what is written. Surely, the experienced and the learned grammarians among them will be able to write better and understand more completely, grammatically speaking, what is written. But anyone with the basic knowledge of the logograms and syllabograms and the strategies used in writing and reading with them can understand the message assuming they would understand it if spoken.⁷⁷

In the case of verbs with the “in-the-past” or “back-reference” enclitic attached (as in Figure 76 above), the syllabogram will not even be T181 and will not even have the value **ja**. This pervasive pattern in the Classic texts illustrates the use of a syllabogram having the value **ji** when spelling passive forms, a problem not mentioned in Houston et al.’s essay. Would one not have to assign the same grammatical meanings to those glyphs too? But the vowel of those glyphs is the same as that in the enclitic which is also part of the word in such contexts. The glyphic alternation in specific contexts such as these provides additional evidence that the emphasis is on reading the individual morphemes and the whole lexemes, phrases, sentences, and passages; and not on grammatically analyzing the glyphs that are used. Once these verbs are read along with the other words in the phrase or sentence, the meaning of the word, phrase, sentence, and passage can be understood. Remaining behind at the glyphic level to analyze the supposed grammatical meaning of a particular glyph could easily distract the reader from reading the rest of the phrase or sentence that may be needed to provide insight into the intended meaning. The basic characters of the system would intrude upon one’s understanding.

⁷⁷The possibility that one might understand what is written but not be able to understand a particular speaker or any speaker of the language is not at issue here. It may very well be an issue for someone reading a foreign language or for someone who is hard-of-hearing or not able to hear at all. Those circumstances have no direct bearing upon the point being made here.

2.2.11.2 Addressing Issues That Might Lead to Grammatical-Sign Theories

Surely the question might arise as to why these two groups of eminent epigraphers and linguists would formulate such a theory at all, if it were not needed. I will not presume the ability to answer that specific question, but I can offer comments concerning aspects of the Maya writing system that could tempt one to undertake

such a task. Because of the CVC and CVCVC character of logograms and the CV character of syllabograms, any single syllabogram that follows a logogram must either write a CV suffix or be interpreted in a different way. This can perhaps be best illustrated by comparing a few versions of a transitive-verb direct-object combination that occurs often in the Classic Period texts and is illustrated in Figure 77. In Figure 77a, a scribe has written *uchoko'w ch'aaj* “he/she threw drops” using syllabograms, **'u-cho-ko-wa ch'a-jj**. Following the method proposed by Yuri Knorozov (1967:65), albeit for word roots, one simply needs to read every syllable in order, omitting the vowel of the final syllabogram in the transcription. In this case, the result is *uchoko'w ch'aaj*. But that is, of course, the “ideal case.”⁷⁸ However, the ideal case does provide an important piece of evidence for the correct transcription of this verb form.

What if the scribe wished to write the word root using a logogram, which is the most common way for this particular verb. Figure 77b shows an example of this which can be transliterated as **'u-CHOK-wa**. If the scribe really were writing the same verb

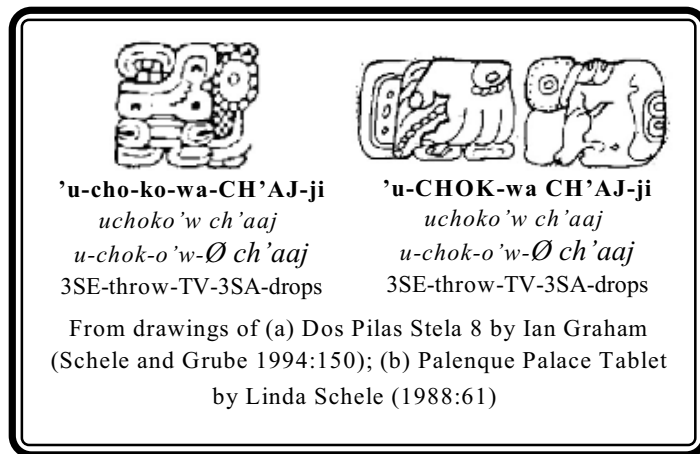


Figure 77. Reading strategies for logographic and syllabic spellings of the same root and suffix

⁷⁸ Although this is the ideal case for epigraphers, it may or may not have been viewed that way by the Maya scribes or readers.

form as that spelled syllabically in Figure 77a, how could the path from the transliteration **'u-CHOK-wa** to the transcription *uchoko 'w* be analyzed and justified? One of the paths would be to declare that all logograms can contain in themselves whatever affixes are needed for the verb without actually changing shape or having something added (cf. Mora Marín (2005:72-73, 81). Although this may be an acceptable approach in the case of root intransitives, it is abundantly clear that a wholesale approach to logograms based upon that hypothesis would result in a system that is completely unmanageable and open to a solipsistic approach to logograms. The concomitant problems this would create for interpretation and understanding are patent. It would also leave unexplained why practically all scribes actually do follow through with the job of writing all of the required affixes.

Another possibility is to declare **wa** to be a logogram or morphosyllable with the value **-WA** or perhaps **-V₁W**. Besides all the arguments that have already been made here against such an approach, one could add that it causes all of the syllabic spellings of this and other root transitive verbs to be anomalies. One would have to transliterate the syllabic version as **'u-cho-ko-OW** (or **-WA** while actually meaning *-ow* as Houston et al. do), and then to drop the vowel of the second syllable. There are rare cases of syllabically spelled words for which the scribe did intend that to be done as in Figure 78. The transliteration of the passive verb form is **jo-ch'o-ja**. The correct transcription is *johch'aj* “it was drilled.”⁷⁹ There are ways to explain this rare phenomenon far short of revamping solid rules of thumb for glyphic transliteration and interpretation and without introducing unnecessary looseness by allowing polyvalency for a relatively large number of

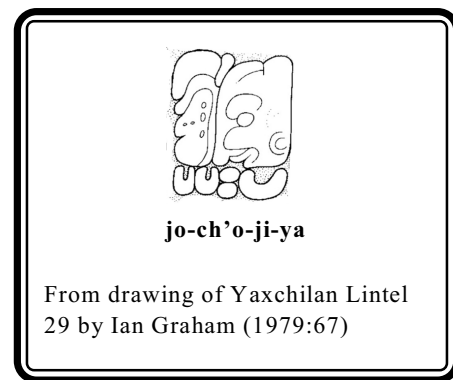


Figure 78. Rare syllabic spelling of a verb in the passive form

⁷⁹The infixed *h* included here is never written in the Classic script (although some suggest rare exceptions). For this reason it will not be included in transliterations but only in transcriptions.

syllabograms. Rare occurrences sometimes give great clues concerning the value of specific glyphs that should be taken seriously. However, rare occurrences should not be given greater weight in determining reading rules than the hundreds of examples that are more suitably explained under different rules or strategies.

What this example illustrates instead, is that, at root and stem boundaries, it is possible for a scribe to write a syllabogram whose vowel will not be used in actually reading the word and so it should not be used in its transcription either. Doing so is not anomalous. Not including one of the internal vowels in the reading or transcription of a verb form is specifically required whenever a

positional verb is either written syllabically or with a syllabogram between its root logogram and one of the CVC intransitive positional suffixes *-laj* or *-waan*. Examples of this with the *-waan* suffix are shown in Figure 79a-b. The first example in Figure 79a can be transliterated as **pa-ta-wa-na**. Since it is spelled syllabically with CV syllables, it unavoidably includes one extra internal vowel. When reading this word and so also when transcribing it, the vowel **a** of the syllable **ta** is not used. The resulting transcription is *patwaan*. Because both the root and the suffix share a CVC shape, the reader is required to disregard or not use phonetically the vowel that occurs in the spelling of the last syllabogram of the root. In these circumstances, the vowel is always the same as the previous one in the word.

It is this type of strategy that should be kept in mind when encountering a rare spelling such as **jo-ch'o-ja**. Approaching it precisely as one normally would approach these spellings of positional verbs produces the correct result: *johch'aj*. The final

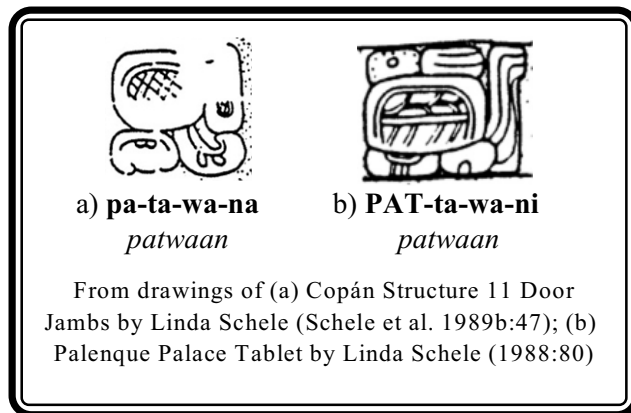


Figure 79. Two forms of an intransitive positional verb with extra vowel at root boundary

syllabogram need not be reinterpreted as a logogram nor as a morphosyllable with a determinate grammatical meaning. A vowel repeating that of the root can be used in writing the final consonant of the root as usual while the syllable *ja* is used to spell the rest of the lexeme. The vowel of the sign used to write the final consonant of the root is not used in the pronunciation or transcription of the word. It should also be noted that the same strategy is used in spelling derived transitive positional forms, the suffix of which, *-b'u*, begins with a consonant.

An example of the same intransitive positional with a logogram used to write its root is shown in Figure 79b. Although the logogram obviates the necessity of including a **ta** syllable, there are several examples, such as this one, which nevertheless include it. It operates in a fashion similar to a phonetic complement at the end of a word, that is, it reinforces or signals the last consonant of the logogram. Another very common logogram **CHUM** often includes a **mu** syllable as well. The difference is that it is almost always infixes in the logogram itself. This is not easily possible in the case of PAT because of the much smaller size and compact shape of the logogram. In any case, because the vowel is the same shape as that of the root, the strategy of not using the vowel to sound out or transcribe the word is always an option, just as it is with the *johch'aj* example which prompted this discussion.

It has already been noted that the vowel of a word-internal syllabogram occasionally is not to be used in the transcription of a lexeme. In the case of positional verbs which most often take a CVC or a CV suffix, this always occurs in syllabic spellings of the root and also happens with logographically-spelled positional roots when they include a separate syllabogram indicating the final consonant of the logogram. In these cases, that syllable contains the same vowel as that of the root. With this discussion in mind, we can now return to the verb that initiated this discussion.

Two examples of clauses written with the verb CHOK were shown in Figure 77 above. The transitive form with the root written using a logogram, as in Figure 77b, sometimes also includes a **ko** syllable between the logogram and the final **wa** syllable.

Since it is also present when spelled syllabically, this has led to the conclusion that the root transitive marker contained a harmonic vowel (cf. Wald 1994a). This conclusion was backed by the linguistic evidence from both the Eastern and Western Ch'olan languages.

Because of the significance of this $-V_1'w$ suffix and because a harmonic vowel is the default for the final syllabogram of syllabic spellings of the root and for phonetic complements of logographic spellings, any variance in that vowel when writing other forms of the same verb would be significant.

Since it is a transitive verb, the root *chok* can and does also appear in the passive voice. Figure 80a shows an

example of this verb written syllabically as **cho-ka-ja** *chokaj*. Following the normal reading pattern, one simply reads the consonants and all the vowels except the last. It should be noted that despite the frequency of this verb, no examples of **cho-ko-ja** have been found, which in itself is an indicator that such a spelling is likely non-standard, albeit possible considering the **jo-ch'o-ja** *johch'aj* example. What has been found quite often is the spelling **CHOK-ka-ja**, which, transcribed, produces *chohkaj*. The example in Figure 80b indicates that the scribes sometimes saw fit, just as in the case of the transitive version of this verb, to expressly indicate, by including the syllabogram **ka** after the logogram **CHOK**, that the correct reading of this verb is *chohkaj*. The scribe is using a spelling that explicitly points out the correct vowel to use. The final syllabogram **ja** does not need to be imbued with a grammarian's catalogue of possible meanings much less with a meaning that would often be incorrect in other contexts. Only one simple rule

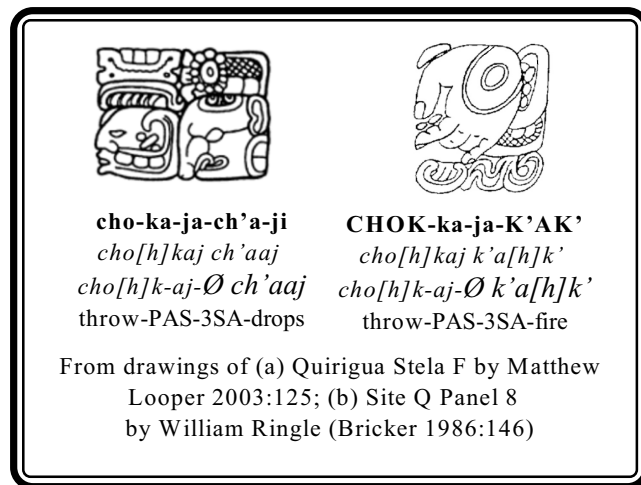


Figure 80. Syllabic and logographic spellings of a passive verb form

of thumb has to be followed. It is that duplicate consonants within a word are allowed but do not affect either the pronunciation or the meaning. Such a rule is basically universal and obvious since duplicate consonants in the same word are not phonemic in Mayan languages.

An even more important question is why a scribe would even bother to insert a **ka** syllabogram here if the value of the final **ja** were really **-AJ**? If it really were a morphosyllable, including **ka** to produce **-ka-AJ** when it is clearly not necessary, would only create confusion. Instead the scribe in these cases takes this extra step to help ensure the correct reading of the form. The goal is not to refer to or indicate a “passive” verb, but to write the word *chohkaj* and to let the reader, who as a native speaker recognizes the word and meaning in context, read the message and understand it. Just as with other scripts in other languages, neither speaking, reading, nor even writing requires one to consciously interpret the grammar. The goal of a writing system is not to approximate a language’s grammar, but to approximate a language’s sounds and words at least to the extent necessary for communication. As such, the Maya script accomplishes this very well.

The theoretical argument being presented here, that using certain syllabograms at various places in a lexeme and, because of the nature of Classic Ch’olan, especially at the end of words, directly produces a specific phonetic reading and not a specific grammatical interpretation. Practical (as opposed to theoretical) grammatical understanding surely follows, but it takes place at the level of the language itself and not at the level of the written signs. The grammar need not be consciously analyzed, but rather needs to be grasped at the same level that it is grasped when hearing the language. In other words, one needs to be able to express oneself or to understand what is written, read, spoken, or heard in a manner that reflects a working knowledge of the language including its forms. One does not need to be able to explicitly list or discuss the grammatical rules in any abstract way. Although such extra knowledge will likely help, it is not required. With this in mind, some of the various syllables or syllabograms in

question will be examined in an attempt to explain how they may actually be used in relation to the current discussion.⁸⁰

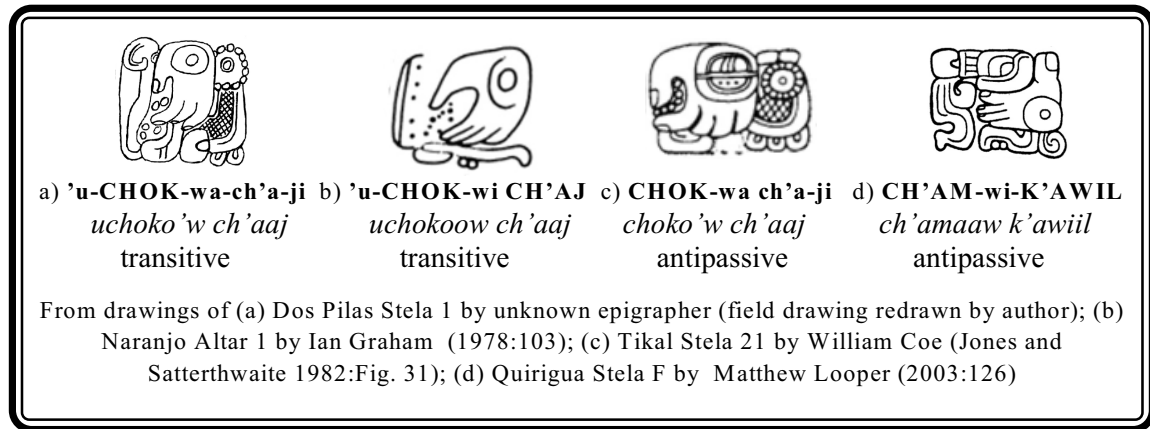


Figure 81. Two differently-valued syllabograms writing same suffix and same suffix writing two different morphemes

2.2.11.3 Strategies for Reading Some Syllabograms in Question

2.2.11.3.1 Reading Final wa and wi Syllabograms

The syllabogram T130 and other **wa** syllabograms are used in verbal contexts to signal the reading of $-V_l 'w$ in both syllabic and logographic spellings. However, it is really only when the root is written with a logogram that the reading seems problematic. Nevertheless, the verb in Figure 81a which can be transliterated as **'u-CHOK-wa** triggers the reading and transcription of the lexeme *uchoko 'w*, resulting in what is a $-V_l 'w$ pattern. However, the syllabogram T117 **wi** is also used to write a suffix of a similar shape in verbal contexts, $-VV_l w$. Figure 81b shows an example of the verb root *chok* written with a logogram followed by the syllabogram **wi**.⁸¹ Despite this difference, the transcription of

⁸⁰Not all of them will be discussed here. Others will be addressed later when specifically outlining and reviewing Classic Ch'olan verb morphology. Also, details concerning the various verb forms and their recognition will be provided at that time.

⁸¹Note that I have checked this drawing against copies of multiple very high resolution photos taken and supplied to me by Mark Van Stone. I have no doubt that the drawing is very accurate and that it is a **wi** syllable that was carved on this monument. Detailed comment as to its interpretation as an active transitive verb will be provided later in Section 3.2.1.2.

the root and its suffix is basically the same although the **i** of **wi** likely indicates a difference in the character of the vowel of the suffix, in this case resulting in *uchokoow*. This indicates a slightly different pronunciation of what is basically the same lexeme as that written in Figure 81a with **wa** instead. Both forms, whether transcribed as *uchoko'w* or *uchokoow*, prove to be grammatically the same forms of the verb, transitive roots including their root-transitive status markers.

The example in Figure 81c includes the same verb root as the first two, *chok*. It also takes the glyphic suffix **wa** and writes *choko'w*. Thus it consists of the same verb root with the phonetically identical suffix as in Figure 81a, $-V_I'w$. However, it lacks the *u*-ergative dependent pronoun that is present in *uchoko'w*. The grammatical difference is that it writes the antipassive form of this same verb.

The example in Figure 81d is written with the glyphic suffix **wi**. The verb is different but it is also a transitive root *ch'am* that here is written as *ch'amaaw*, an antipassive form of the verb. The suffix that it writes is phonetically parallel to that written by **wi** in Figure 81b *uchokoow*. Again, the only essential difference here between the two is the lack of the ergative dependent pronoun in the Figure 81d example.

The existence of these two sets of suffixes make two facts apparent. First, two different syllabograms can be used to write the same grammatical suffix. That means that the only distinction is the slightly different phonetic value of the vowel of the suffix. Since that is the case, the purpose of the different spellings lies in the phonetic result and not in any grammatical meaning. Second, since each identical member of the sets can write two different grammatical suffixes of the identical phonetic shape, they cannot be used to determine which of the two grammatical suffixes is being written. This can be determined only in the context of other factors, primarily the presence or absence of the ergative pronoun and also in some cases the presence or absence of both a grammatical object and subject. The conclusion, then, is that the syllabograms are used to write suffixes of a specific phonetic shape and not of a specific grammatical meaning.

Neither the syllabograms nor their syllabic values themselves convey meaning in these contexts. They simply provide a spelling for particular words. In this case both syllabograms write the same phonetic suffix as well. When these same syllabograms occur in verbal context preceded by another syllabogram following a logogram or in completely syllabic spellings, one need only follow the general rules of thumb or strategies for reading, that is, to simply not include the sound of the vowel in the final **wa** or **wi** syllabogram unless it also matches the vowel of the root. In the case of the logographic spellings, one either uses the vowel of the final syllabogram or, as here with a member of a very small set of syllabograms, uses a harmonic vowel matching that of the root.

Up to now, no syllabic spellings of the antipassive forms with either syllabogram have been found. However, historical linguistic studies have supported the likelihood of these transcriptions (cf. MacLeod n.d. and Lacadena 2000) Finally, in most cases outside of obvious verbal contexts, **wa** behaves just as it does on syllabically written verbs. It also occurs on non-verbal roots and stems in spellings such as **'a-ja-wa**, *ajaw* “lord, king,” **ka-ka-wa**, *kakaw* “cacao” **ja-sa-wa** *jasaw* “banner, and **ka-se-wa** *kasew* (or *kase'w*), the name of the Yukatekan month *sek* in Ch'olan.

2.2.11.3.2 Reading Final yi

Syllabograms

In a similar way, the T17 and other **yi** syllabograms are used on verbs to write a *-VV_iy* suffix as shown in Figure 82. As is often the case, it is the completely syllabographic spellings that provide the clearest indicator as to how the verbs written with a final **yi** are to be transcribed (see Figure 82b). The vowel

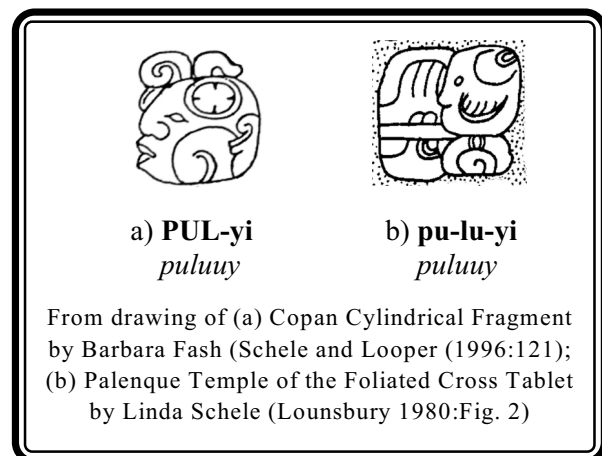


Figure 82. Logographic and syllabic spellings of a mediopassive verb form

of the second syllabogram always corresponds to the vowel of the root which is that of the first syllabogram. Following the normal rule, the vowel of the final syllabogram **yi** is not used phonetically in the reading or transcription except insofar as one subscribes to the vowel-length theory for suffixes (cf. Lacadena and Wichmann 2004). This syllabogram is used to write the suffixes of some mediopassive verbs that express change of state or motion such as *jub'uuy*, *puluuy*, and *tzutzuuy* among others.⁸² It is among the small set of syllabograms which is used to write a $-V_l$ suffix, in this case $-VV_ly$. As will be noted later, there is some evidence that the grammatical meaning of this suffix may have already begun to change in the Classic Period. Whether or not that is true, such changes in meaning would not necessarily affect how the suffix was written, since grammatical meaning is not involved at the logographic or syllabic level nor at the level of transliteration. On the other hand, if the actual pronunciation of the suffix changed, it is very possible or even likely that the way it was written would also change. As with the other verb forms, any possible changes in meaning take place at the level of the actual language itself and not at the level of the glyphic signs which are instead the most basic components of the writing system. However, since they are writing sounds, changes in spelling could take place unless inertia, tradition, or other causes prevent such changes from being reflected in the writing system.

2.2.11.3.3 Reading Final **ji** Syllabograms

A third set of syllabograms, including T88 and T136 **ji**, also functions in way similar to **wa** and **yi**. Members of this set are used in the spelling of the transitive resultative (“perfect” or “stative”) form $-VV_j$ or $-VV_j$ as shown in Figure 83.⁸³ For

⁸²This whole group of verbs and the changes in both the suffix and the verbs that take it will be discussed in detail later in Section 3.3.2.

⁸³This transitive verb inflection was first proposed for Classic Ch’olan by Barbara MacLeod (2004) and will be discussed in much more detail below in Sections 4.1.3 and 4.7. She has reconstructed it with a long vowel as $-VV_j$. Haviland uses the term STAT, for “stative” to apply to this form. It can be used in the modern Tzeltalan languages for constructions similar to the English and Spanish perfect aspect which is the source of MacLeod’s classification of it as the “perfect” aspect. However, as will be explained later,

(continued...)

example, the resultative form of the verb *pat* when used as a transitive meaning “make, do” is **’u-PAT-ta-ji** *upataaj*, literally it means, “He is in the state of having made/done it.”

One point to note here about the use of **ji** is that this same syllabogram is also used in the context of passive forms. However, in that context, it is not the final syllable but instead writes the final *-j* of the passive form and the *i* of the enclitic *-iiy*. This is again a clear indication that grammatical meaning does not enter into the syllabograms themselves but rather is present only at the level of the language.

The signs themselves operate instead at the phonetic level. What is true for these two uses of **ji** is that the actual final phonetic value or transcription of a syllabogram is affected by the context in which it occurs. That does not make it incorporate meaning although this particular writing strategy may indeed be one of the main factors that spurred on the theories that located grammatical meaning in such syllabograms.

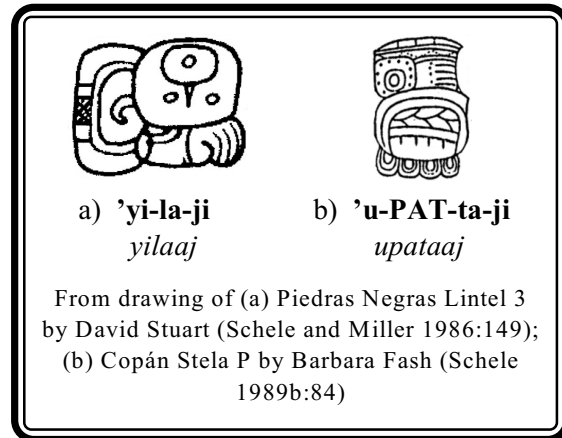


Figure 83. Logographic and syllabic spellings of a resultative verb form

2.2.11.3.4 Reading Final l + Vowel (lv) Syllabograms

The set of syllabograms with IV values (**la**, **le**, **li**, **lo**, **lu**) are used somewhat differently from the three syllabogram sets just examined. Some examples of the use of these signs are shown in Figure 84.

⁸³(...continued)

its actual function in both Tzeltal, Tzotzil, and Classic Ch’olan is quite different from the “perfect” and especially the “actional perfect” as otherwise defined by most linguists. In this study this inflection will be referred to as the “resultative aspect” for reasons which will be explained in detail later.

The **wa/wi** set signals a -
V_lw suffix, the **yi** set a -*VV_ly*
 suffix, and the **ji** set a -*VV_jj* or
 -*VV_j* on verbs. The IV set,
 however, signals an -*l* suffix
 preceded almost always by the
 vowel that the syllabogram itself
 includes as part of its value. In
 spellings that include a
 syllabogram preceding the IV
 syllabogram, the vowel of the
 penultimate syllabogram usually
 matches the vowel of the final
 syllabogram. Not coincidentally,
 many of these spell adjectival
 forms which in the Ch'olan
 languages in various contexts take
 -*V_ll* suffixes as seen in Figure
 84a-b. When the root is written

with a logogram, the vowel of the IV syllabogram normally matches the vowel of the
 logogram.

In other contexts, the vowels of the logograms do not always match those of the
 final IV syllabograms as in Figure 84c. Thus instead of *uk'uhul tzak* “his holy conjuring”
 and *ti k'ahk'al jul* “his fiery spear” as in Figure 84a-b, this example is instead *uk'uhil*
k'ihnich kan b'ahlam “his holy gods, ‘Great Sun’ Snake Jaguar.” In these instances, the
 required or intended vowel to be read between the previous consonant and the **l** consonant
 is almost always that of the IV syllabogram itself. There may be a few exceptions
 suggested based upon the Colonial and Modern Ch'olan and Tzeltalan languages, but

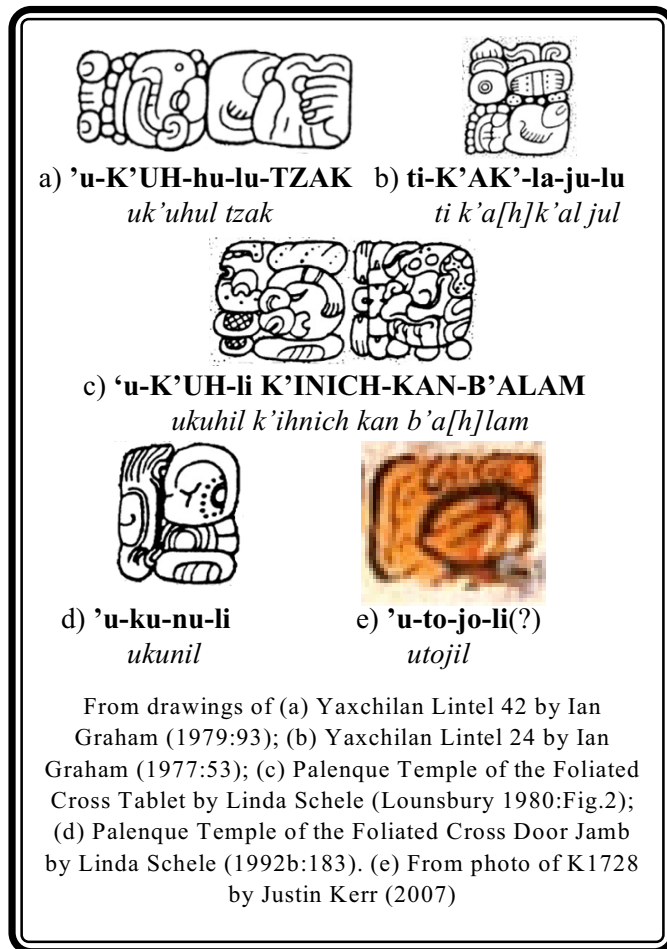


Figure 84. Forms written with a final IV (l plus vowel) syllabograms

usually the vowel of the final syllabogram instead of the root vowel is the correct one. This occurs most often when the root is nominal instead of adjectival or when the word is used nominally instead of adjectivally.

Finally, there are some occurrences in which the penultimate vowel of syllabically-spelled lexemes do not contain the same vowel as the IV syllabogram. One of them is shown in Figure 84d. In such cases, the preceding vowel matches that of the root. In such cases it is still more than likely that the vowel of the final IV syllabogram should be used instead of the root-harmonic vowel. In the example shown here, *kun* is a noun root meaning “pile” in Tzotzil (Laughlin 1988:225) and “platforma para maiz” in Ch’ol (Aulie and Aulie 1998:20).⁸⁴ As such at Palenque it refers to the temple mounds built by the Ruler Kan B’ahlam. As a possessed noun, the correct transcription is clearly *-il*, thus *kunil*.

Although these rules of thumb may not hold in every case, they are clearly applicable in almost all of them. It is important to keep in mind that this is not an artificial writing system. When evaluating these reading strategies offered as an alternative to the grammatical logogram and morphosyllable theories, it should be kept in mind that when explaining their morphosyllable **-IL**, Houston et al. (2001a:15) state that “the shape of the vowel is **unpredictably** given by the particular word with which it co-occurs.” They continue by stating, in reference Figure 84e, “The written form **to-jo-IL** offers no guidance whether the form should be transcribed *toj-il*, *toj-el*, *toj-al*, *toj-ol*, or *toj-ul*” (Houston et al. 2001a:16).

It may be true that one could find some of these variations if one surveys all the Mayan languages in search of vowels that could be used with a particular word in some contexts. However such an approach is not really recommended in these cases. It is emphatically not true that “no guidance” is offered in the system as to how “the form

⁸⁴This interpretation was suggested by Barbara MacLeod (1995:51). An alternative suggestion of “oven” comes from Michael Carrasco (2005:91) based upon Yukatek. For the present purposes, both of these interpretations are based upon noun roots and so the difference is moot for the point being made here.

should be transcribed.” There are only two possibilities in their example, that is, either *tojol* or *tojil*. In the current example, only *kunul* and *kunil* are possible within the system. There is no evidence at all of the looseness envisioned by Houston et al. in such spellings. In only very few cases does one have to make a choice as to the vowel to be used, and even then, the choices are limited to two. What is more, this choice is present in other contexts as well, as for example, in the spelling **jo-ch’o-ja** in Figure 78 above. In that case, the **a** of the last syllable is to be used in the transcription and the **o** reflecting the root vowel, and the usual spelling of the transitive root, is to be left out. That is also what is almost always correct in the case of -VI final syllables as well. The choice comes from both the usual spelling rules and the context.

In the Figure 84d example of **’u-kun-nu-li**, there may be several issues leading to this spelling. First of all, the vowel of the suffix is clearly the preferred vowel except in cases of the verb forms that have already been reviewed. Second, in the case of attributive adjectives, the vowel of the IV syllable is the root vowel, thus the issue does not arise. Third, in the case of nouns, the vowel to be used is the vowel of the IV since that is what occurs in the language as reflected in those most closely related to it, the Ch’olan and Tzeltalan languages. Fourth, in this particular case, if the scribe had written the lexeme instead as **’u-ku-ni-li**, it would have been indistinguishable from **’u-TUN-ni-li** which also occurs often in the texts since T528 can have the value of either logographic **TUN** or syllabic **ku**. When it has the value **TUN**, it is almost always accompanied by the phonetic complement **ni**. If the **nu** syllable had not been used here, *kunil* could have easily been misinterpreted as *tunil*. For that reason, the scribes made use of the option of using a syllabic sign that contained the vowel of the root vowel, taking advantage of the strategy that allows that vowel at the root boundary to not be used in the reading of the word.

Systems that develop over time often include a few exceptions, both because the language itself changes while the spelling may not, as supremely evident for the English system, and because the practitioners vary in their application of the possible strategies.

Still, these reading rules-of-thumb are quite simple and straightforward enough to enable any text to be easily and correctly written and read. Most important of all, they do not require each reader and writer to be a professional grammarian. They just require the knowledge of easily learned reading rules such as those already presented along with an understanding of the native language. Of course, learning the syllabary and the logograms would involve a much longer time investment. However, even the chore of learning and remembering the signs has been made easier by the system because of the conspicuous pictorial, iconic, and symbolic content of both its syllabograms and logograms.

2.2.11.3.5 Reading Final **b'i** Syllabograms

The syllabogram **b'i** is used when writing derived instrumental nouns such as those shown in Figure 85. This is not surprising because in all the Ch'olan languages suffixes such as *-ib'*, *-nib'*, *-lib'* are the most common instrumentals that derive nouns referring to items, tools, and places commonly used for specific tasks or purposes. Some others in *-Vb'* exist, but except for *-äb'* (*ap'*) in Chontal (Knowles 1984:179-180; Keller and Luciano G. 1997:428), they are now unproductive (cf. Wichmann 1999:109 for Ch'orti').⁸⁵ Unproductive suffixes tend to occur on words that are viewed or

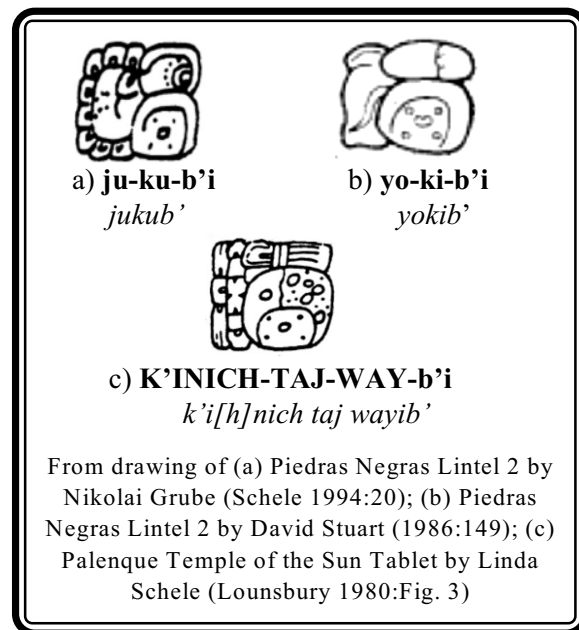


Figure 85. Forms written with a final **bi** syllabogram

⁸⁵As will also be noted later in Sections 5.1.1 and 5.1.2, the suffixes used to indicate instruments and place are not randomly variable in Colonial Tzotzil either.

reinterpreted as wholes or single words rather than as combinations of a root and suffix. In such cases, the suffix is often no longer employed as a separate morpheme that can be used with a class of stems to form new lexemes.

One word using an unproductive suffix that occurs in the Classic Period is *jukuub'*. It has already been mentioned in Section 2.2.8.1 above as written with a logogram whose value is a multisyllabic **JUKUB'**. That this word is viewed as a whole is reflected in its presence throughout the K'iche'an, Q'anjob'alan, and Ch'olan language families in almost the same form, and especially with an *u* or *uu* second vowel (Kaufmann 2002:995). This is also its form in the Classic Period. Although it is spelled **ju-ku-b'i**, it is still most likely meant to be read as *jukuub'* and not as **jukib'*. We have already argued that such words can be easily written completely with a logogram since what was likely a suffix, either at another time or in a different language, is now in practice treated by speakers as simply an integral part of the whole word. This is why certain suffixes come to be analyzed as unproductive, that is, no longer actively used to derive new lexemes. They are no longer comprehended as suffixes that can be attached to words other than those on which they currently occur.

There may also be another reason why **JUKUB'** may be written with a final **b'i** syllable when written syllabically. This reason is also linked with its reinterpretation as a unit instead of a root plus a suffix. The final **i** could be an indication that the final vowel is indeed a long *uu*. That is indeed its spelling in the languages that still preserve vowel length.

Other than special cases such as the one just discussed, the syllabogram **b'i** normally writes *b'i* in syllabic spellings. What is more, it is not true that just any vowel can be inserted in place of the **i** even if **b'i** is the final syllabogram. As is almost always the case, there are really only two possibilities. In Figure 85a, it would be either *u* (*uu*) as written by the second to last syllabogram or *i* as written by the final syllabogram itself. When immediately preceded by a logogram, the syllabogram **b'i**, is often meant to write *-ib'* as in Figure 85b.

Yokib', as shown in Figure 85b, occurs very often at Piedras Negras because it forms the part of its Emblem Glyph that serves as a name for the polity. Some have interpreted *yokib* in that context as referring to a cave, cliff, or, canyon, or sinkhole (cf. Boot 2003:92,99). However, all those interpretations are based etymologically upon a Proto-Mayan word **'ook* (Kaufman 2003:1318) meaning “enter.” If this is the case, at least the core meaning would be “entrance.” Then, one would expect instead *ochib'*, since the attested root in both Ch'olan and Tzeltalan is *och*.⁸⁶ Important for the present purposes is the clear indication given by the spelling **yo-ki-b'i** that the intended suffix is *-ib*.

Finally, although the word *way* written with a final **b'i** syllabogram seldom occurs unpossessed, there is an example of it shown in Figure 85c. In this case it occurs as part of the name of a place where one of the Palenque Triad gods was born. As *wayib'*, it likely refers to a room where one sleeps and dreams and so what one might call a “bedroom” whether or not the connotation connected with it in this case is primarily a place to sleep or a place for ritual ceremonies.

For the present purposes, it is important to note that the likely intended suffix in both these cases is *-ib'*. Although the example of *yokib'* chosen in Figure 85b is written glyphically with three separate signs, the Emblem Glyph of Piedras Negras usually occurs with the **b'i** syllable infixed within the **ki** syllable. In all the *wayib'* examples, the **b'i** syllable is infixed into the logogram which writes the root. Although it should not be

⁸⁶It has already been suggested earlier that the name taken by *Janaab' Pakal's* successor to the throne at Palenque, *Kan B'ahlam*, preserves an older spelling. David Stuart (2005:92-93) also notes that there are some other similar spellings such as *k'am* instead of *ch'am* for “grasp” or “take” and suggests that perhaps this suggests a Yucatekan influence. However, in regard to *yokib'*, Kaufman (2003:33, 1320) notes that among the Yucatekan languages, it is attested only in Mopán as *okeeb'*. Since both the Palenque and Piedras Negras examples end in *-ib'*, if this form was borrowed from Yucatekan, it likely occurred before the Ch'olan sound change from /e/ to /i/. In that way, the suffix on that borrowed word would have also changed to *-ib'* along with the other relevant /e/ vowels. Also, the Piedras Negras example is not unusual and could have preserved an older name for the polity dating to before the Greater Tzeltalan sound change from /k/ to /ch/. In sum, instead of borrowing from Yucatekan, it could also have been preserved from earlier Greater Tzeltalan times. Such preservation would be more likely, if only in special contexts, in a society that had a written language.

taken as a rule to be universally applied, such infixation, may be an indication that the infixed syllable is to be read with the vowel first, as with *wayib'*, or that the final syllable combines with the preceding syllabogram to write the expected or desired suffix, in these two cases: *-ib'*. This rule of thumb should be taken with a grain of salt, however, since the same results could apply if the two signs were indeed written separately. What one never finds in such circumstances is a syllable infixed into a logogram which has a vowel different from the infixed syllabogram.

Instrumental and locational nouns formed with *-ib'* often occur in contexts in which they are possessed. When possessed, these nouns add a final *-il* suffix as do most instrumental and locational nouns in such contexts. Examples of two of them can be seen in Figure 86a-b. To write this suffix, a final **li** syllabogram is added which combines with the **b'i** syllabogram to write *-b'il*. Since it is no longer the last syllabogram, **b'i** is best

viewed as simply spelling *b'i*, resulting in the suffix *-b'il*. As in similar cases already discussed, the vowel of the first suffix of a pair in the Ch'olan languages is often elided, a phenomena abetted by the normal placement of stress on the last syllable of each word. Later sections will include more examples of this type of shortening.

The example of *wayb'il* in Figure 86a from the Palenque Dumbarton Oaks Panel may be referring to the room that was a resting place of *Janaab' Pakal*, the father of the current ruler. The example of *yokb'il* in Figure 86b is from a recently discovered platform in Temple XIX at Palenque. It is likely based upon the same root *ok* as is *yokib'* which occurs in the Piedras Negras Emblem Glyph. In this case, it refers to the very platform on which the inscription is located as noted by David Stuart (2005:92). Most

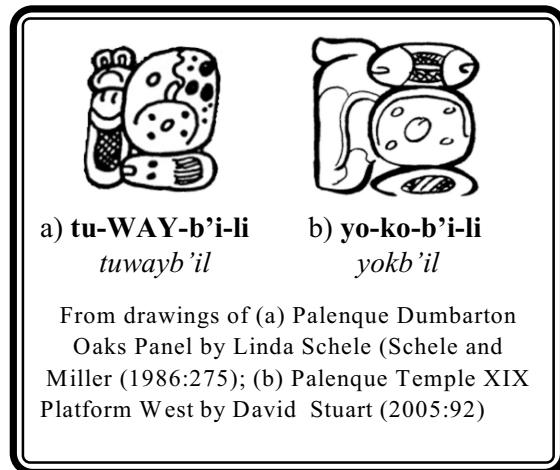


Figure 86. Use of non-final **b'i** and final **li** syllables to write *-b-il* suffix.

important for the present purposes, however, is the spelling. The root is spelled **yo-ko** instead of **yo-ki** as in the Piedras Negras example. Here we again seem to have a choice as to whether the word should be *yokob'* or *yokib'*. However, in this case, that choice is only apparent. We have already seen in the case of *wayb'il* that the vowel of the derivational suffix *-ib'* is elided when the word is lengthened by the addition of *-il*. Because the same phonetic process takes place in the word *yokb'il*, the vowel of the second syllabogram writing the root would not be pronounced anyway. The apparent difficulty is not real. In fact, the **ko** syllable was probably chosen precisely because such root harmonic vowels are routinely not used in the lexeme's pronunciation in such circumstances.

It is interesting that Houston et al. (2001a:22) used this example in Figure 86b to show that two morphosyllables could be used next to each other to write a word. Yet when they transcribe it, they put the **i** of **b'i**, their **IB'**, in parentheses: **(I)B'**. This example helps to highlight the unnecessary complexity their theory adds to the system. While I agree with them that their **i** would not be used in the transcription, the **i** of **b'i** is certainly used. What is instead not used is the **i** of the final syllabogram **li**. One does not have to add new rules concerning the dropping of morphosyllabic vowels. Instead, the basic strategies and rules still apply. A harmonic vowel can be dropped at a word or stem boundary and indeed often must be dropped in syllabic spellings of certain constructions as already seen in the case of positionals. Then one need only leave out of the transcription the vowel of the final syllabogram, and that is one of the most common spelling strategies of the system.

For the reader, the sign **b'i** is not meant to be interpreted grammatically as a *-Vb'* instrumental suffix. Instead, it is to be normally read as *b'i* or, in some contexts especially when word final and following a logogram, by using its vowel between the stem and its consonant, as *-ib'*. This apparent reordering of the vowel and consonant positions is best viewed not as a “reordering” or so-called “reversal” of the consonant and vowel of the syllabogram. Instead, the **i** of the glyphic sign can be best understood as

serving as an intimation of the desired vowel sound. Although reordering the vowel and consonant sounds sometimes works in the case of **b'i**, it should be noted that it does not always work that way, especially, for example, when another suffix follows it. This technique would also not work, except when the root vowel is *a*, in the cases of certain syllabograms such as **wa** when it occurs in word-final position to write certain specific suffixes.

Some of the problems encountered in applying basic “reversal” theories also plague the universal morphemic reversal theories that function at the sign level – whether the signs are interpreted as reversed grammatical logograms or morphosyllables or simply as -VC syllables without morphemic overtones. Such theories are not very helpful partly because they are overly-abstract, structural-analytical approaches that then cannot be applied to many of the actually attested forms. They represent an attempt to provide analysis at the sign level that does not rightfully belong there. Creating new logograms, inventing morphosyllables, or viewing what happens as phoneme reversal does not resolve the reading issues, but rather adds confusing complexity on a level at which such reading decisions cannot be made. More helpful are practical reading strategies useful at the basic sign level that produce phonetic results. Then one can interpret the meaning of what is being read in context at the level of the actual language itself. Such an analysis seems more likely to match what was actually practiced by literate native readers and is also more likely to reflect the way most scripts are read.

2.2.11.3.6 Reading Final *si* Syllabograms

The suffix *-is* appears on some unpossessed nouns in the Classic-Period texts as noted by Houston et al. (2001a:17, 23). Some examples are illustrated in Figure 87. In Colonial Yukatek, according to Bolles (2001:1915), the suffix *-is* forms an adjective from a noun or other adjective for example, *kul* “smooth” but *kolis*, *kulis* “bald” and *tul* “excess, overabundance” but *tulis* “complete.”

Contrary to this Yukatekan usage, the words with the **si** glyphic suffix in the Classic-Period inscriptions are not used as adjectives but rather as nouns, as also noted by Houston et al.. In a detailed presentation, Zender (2004) demonstrated that **si** indeed writes an *-is* suffix that is used primarily on unpossessed body parts as shown in Figure 87a-b. Zender (2004:206) also notes that among the Mayan languages,

Poqomam and Poqomchii' provide the most evidence for use of *-is* as a suffix on nouns referring to unpossessed body parts. As he notes from different sources, these two languages attest many examples of these forms including *oqis* "foot" and *q'ab'is* "hand" (cf. also Benito Pérez 1994:71 and Sedat et al. 2001:27, respectively). Important for our purposes here is that there is no evidence of this suffix varying from writing *-is* and so a generalized transcription of it as *-Vs* (as suggested by Houston et al. 2001a:16) is likely overly broad.

Perhaps even more often than with other syllabograms, **si** is used separately to write *-is* even though the lexeme is spelled syllabically and the vowel of the preceding syllabogram is often not **i**. One example of this can be seen in Figure 87b. The final syllable **b'a** used to write the root is followed by the syllable **si**. However, because the **b'a** appears at a root boundary, it is well within the accepted writing strategies of the system not to use the vowel of the **b'a** syllable in the pronunciation or transcription. Several examples of this technique as used in other contexts have already been illustrated.

Figure 88a shows a striking use of the *-is* suffix on the word *way*, meaning "spirit companion," providing an insight into just how close that relationship was perceived to be as Zender (2004:202) notes. Insofar as writing strategies are concerned, there seems to

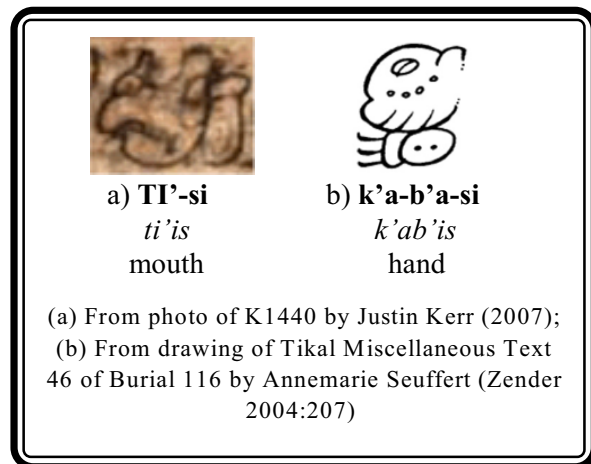


Figure 87. Lexemes written with a final **si** syllabogram

be a tendency to follow the otherwise normal spelling for *way*, in this case, keeping the *ya* phonetic complement and simply adding the *si* following it. The *ya* phonetic complement is so prevalent with this logographic spelling that its presence is not surprising but rather, to a certain extent, expected. Writers and readers have become used to seeing it as a phonetic complement writing the final consonant of the root that they are not likely to use its vowel as part of the suffix. Something similar to that approach was already reflected in the **k'a-b'a-si** spelling in Figure 87b.

Another usual example is from a Rio Azul shell plaque shown in Figure 88b. As suggested by Zender (2004:204), this may refer specifically to fire insofar as one personally drills it. It is written with a

k'a “fist” sign (T672) with two dots above it as an indicator that the syllable should be repeated. This is followed by a **si** sign resulting in **k'a-k'a-si** *k'ahk'is*. Important here is that scribes saw no problem in refraining from using the vowel of the second **k'a** in the actual pronunciation of the word. It is, after all, a root boundary. It is not necessary to declare **si** a morphosyllable with grammatical meaning to account for the spelling.

The example in Figure 88c reinforces the likelihood that scribes adopted a basic set of similar spelling strategies that then sometimes appear unusual only because of the specific contexts in which they are applied. It illustrates the spelling of a possessed body

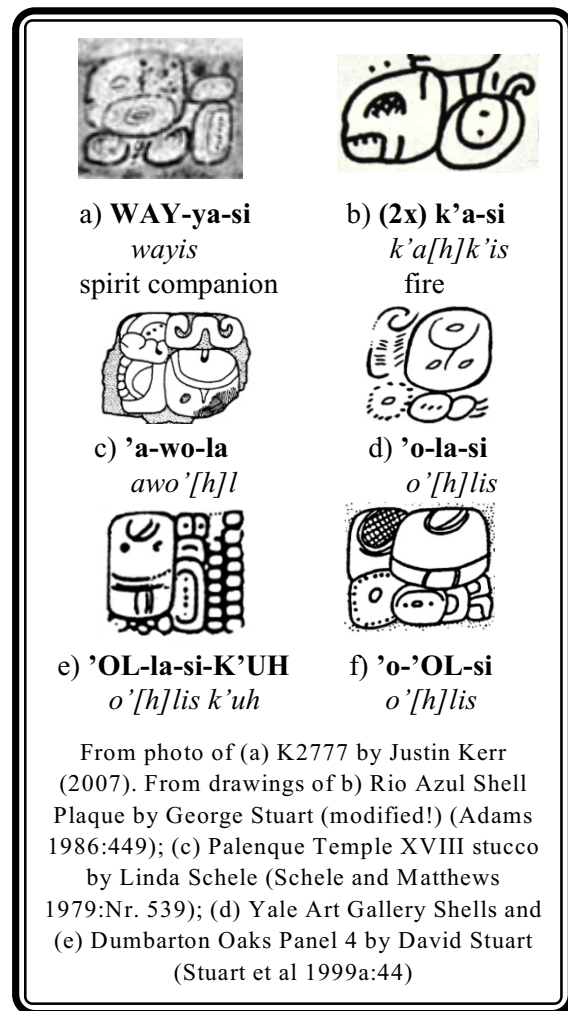


Figure 88. Variation in the spelling of lexemes with a final **si** syllabogram

part similar to others that occur throughout the texts **'a-wo-la**, that is, without the **si** syllable. It is preceded by the 2nd person singular ergative pronoun resulting in *awo 'hl* “your heart.”

The same root *o 'hl* appears in the Figure 88d example. Because it is unpossessed, the root here takes the *-is* suffix. However, although the **a** vowel of the **la** syllable is not needed as such, it is still present. The presence of the **la** syllable here may be to indicate a glottal stop spelling of the root as proposed by Lacadena and Wichmann (2004). What is more, this **la** syllable is sometimes included even when the root is written with a logogram as can be seen in Figure 88e: **'OL-la-si-K'UH** *o 'hlis k'uh* perhaps “center god” since “center, middle” is a common meaning for the root *'o 'hl* in the Tzeltalan and Ch'olan languages when not possessed (cf. for Ch'ol, Aulie and Aulie 1998:86; and for Bachajón Tzeltal, Slocum et al. 1999:88).

Nevertheless, regardless of the stance one takes regarding the presence of the **la** suffix, Figure 88f clearly indicates that one can spell the same lexeme just as well without the **la** syllable: **'o-'OL-si** *o 'hlis*. In fact, although it is not shown here, the context is quite the same since the whole phrase here on the Palenque Palace Tablet is also *o 'hlis k'uh* “center/heart god.” None of this should cause any confusion concerning which vowel is to be used in the transcription of the suffix here. There is clearly no need to broaden the possibilities by analyzing **si** as *-Vs*. Taken out of context, only *-as* or *-is* would be possible anyway. Zender's (2004) analysis demonstrates that only *-is* has any comparative linguistic validity and is doubtless the correct reading.

As already noted in other contexts, the presence of a syllabogram containing a vowel that is not meant to be sounded nor meant to be directly transcribed, regardless of its effect upon the pronunciation of a previous vowel, is a strategy that is occasionally encountered in the Classic-Period script. Techniques of writing used seem to be independent of the type of syllable used - or rather the strategies are quite similar across the board. These strategies are not tailored independently for each particular suffix. Instead, they can and do occur at root and stem boundaries in various contexts. Despite

such seeming anomalies, a reader does not have to place meaning in the **si** sign but rather simply realize that it signals the phonetic reading *-is*. Again, it is not necessary to predefine nor to be explicitly aware of the grammatical meaning of the suffix, but just to note that one is to read the syllabogram **si** as *-is* in these particular contexts. After doing so, one's knowledge of the language will supply the needed understanding. Thus the **si** syllable here follows one of the most common strategies for syllabograms at the end of a lexeme, that is, that the vowel of the final syllabogram is the vowel to be read as part of the suffix. Only in the case of a very few syllabograms in very specific, mostly verbal, contexts does one need to reduplicate the previous vowel instead. In the latter cases, the required vowel sound is explicitly written as an aid to the reader. In the case of the *-is* suffix, there is no doubt as to the required vowel or sound. Therefore, there is perhaps less compunction about neglecting to write the required vowel in the preceding syllabogram or about failing to add a syllabogram containing the required vowel after a logogram.

2.2.11.3.7 Reading Final **ja** Syllabograms

Since it has already been discussed in some detail above in Sections 2.2.10.9 and 2.2.10.10, little needs to be added concerning the use of T181 **ja** on verbs. It alone or with another syllabic sign writes *-aj* when used on the end of nouns and verbs. It carries no meaning in itself but rather writes a suffix *-aj* which has multiple meanings depending upon the word on which it is used and the context in which that word occurs. When some of these same words are used as stems for the attachment of an additional enclitic *-iiy*, that word is almost always no longer written with **ja** sign in that same position, but rather with a **ji** sign such as T88 or T136.⁸⁷ The **i** of the **ji** syllable is then used along with a **ya** syllable to write the enclitic *-iiy*. When the **ji** signs are used following a logogram, there is usually no indication of a preceding *a*. When written syllabically, the last sign used to

⁸⁷There are rare exceptions such as **MAK-ja-ji-ya** on Piedras Negras St. 8 where both signs are present. This particular example and others similar to it will be addressed later in Section 6.5.9.1.2.

write the root or stem usually takes the format C_2a . This seems to leave open the question as to whether the reading of an *a* is intended in these contexts. Since one is in these cases usually dealing with a long lexeme with an accent on the final syllable, it is likely that the **a** is intentionally excluded and is not meant to be read as an actual phoneme. However, a counter argument could be made that the syllabic spellings are the more accurate ones. As already indicated in a different context, elision in such phonetic circumstances is quite common and so is likely intended here as well. In the case of roots written with a logogram, the absence of a C_2a sign preceding the **ji** logogram is likely an indication that none was meant to be read. If an *a* were intended in these circumstances, the scribe could have inserted an additional C_2a syllable as is attested in other circumstances to write a vowel immediately following the stem..

2.2.11.4 Brief Summary of Classic Maya Reading and Writing Strategies

One conclusion indicated by the foregoing data and analysis is that a reader of the Classic Ch'olan texts is not given freedom to choose which vowels to insert between logograms and following syllabograms when reading lexemes. A corollary to this is that the writer does not simply leave such choices open nor are such questions left unanswered. Instead, there are accepted strategies for writing the various suffixes that are practiced by the scribes and are discernible whenever any of these syllables and others, as yet unmentioned, are used. For example, it is simply not evident that the reader can simply choose which vowel is to be inserted when **li** is the glyphic suffix. Instead, it is almost always intended to be *i*. The same is true of the other IV syllabograms **la**, **le**, **lo**, and **lu**. The strategy is similar with syllabograms such as **ja**, **b'i**, and **si**. For others such as **wa**, **yi**, and **ji** in final position, the syllabogram indicates instead that in certain contexts the vowel to be read before the final consonant is that of the verb root or the vowel just prior to the final syllable. These strategies and others involving syllabograms not yet mentioned here are not difficult or confusing, although they would have to be learned by aspiring readers and writers. While some of these strategies are not practiced

one-hundred percent of the time, they are almost always followed. Considering the many different scribes and carvers involved in creating these inscriptions, the similarity in strategies is noteworthy. The option to simply insert a “desired” vowel does not actually exist and is not needed to correctly read what is written.

The system has strategies or “rules” just as do other writing systems. For example, despite the manifold ways to write the same sounds in the English writing system, certain strategies and exceptions to those strategies can be successfully taught to many readers and writers. I suggest that the basic strategies governing the reading and writing of the Classic-Maya writing system are not as complex or complicated as those governing the English writing system. Of course these strategies or rules have to be learned. But once they have been learned, the script can be written and read without being consciously or explicitly aware of the specific grammatical identity of the various derivational, inflectional, and other endings. One need only read using the reading strategies provided and be able to understand the spoken language. Of course, understanding the language means comprehending the grammar internally and implicitly to the extent that anyone who understands a spoken language does. For understanding the language, one need not be a grammarian nor be able to express explicitly the grammatical rules. Explicit awareness of grammatical practice would likely improve one’s ability to read and write. But it would also likely improve one’s ability to speak the language in a way that is more acceptable to the specifically targeted social group. So, theoretically speaking, the advantages and usefulness of explicit grammatical knowledge would accrue not only at the level of the writing system but also at the level of the spoken language. Certain strategies and rules of the writing system are quite distinct from the rules of grammar even though there are points at which the two intersect.

I have proposed that meaning, both lexical and grammatical, comes specifically into play primarily at the level of the language, not at the level of the signs used to express that language in writing. However, this may also be true even at the spoken or aural level of a language. Except perhaps for onomatopoeia, the oral signs used for

speaking and the strategies needed to combine them must be learned in order to communicate.⁸⁸ On the level of writing systems, the same would also be true even if alphabetic signs were used to write these same languages. The same would be true of the signs used to write the Classic Maya language. In all cases, lexical and grammatical meaning is located in the language itself, not in the signs used to transmit it. Perhaps analyzing a statement attributed by Stephen Houston to John Monaghan a few years ago will help to further clarify the difference between a view that finds meaning in Maya hieroglyphic signs and the view presented here that finds meaning in what the signs write rather than in the signs themselves.

Mayan glyphs contain both phonetic clues and easily recognizable pictorial signs. There is evidence that such signs are difficult to produce, but are they difficult to read? Again, there exists little evidence to indicate otherwise, since a heavily pictorial quality may actually facilitate the direct comprehension of meaning (John Monaghan, personal communication, 1992). (Houston 1994:34)

I could agree with the first part of this statement if one added the proviso that basically all Maya glyphs are phonetic, with some of them phonetically representing CV syllables and others phonetically representing CVC and CVCVC words or word roots. I would also add, as argued above in Section 2.2.7, that all of the signs of the Classic-Maya writing system have pictographic or iconic content or origins, although not always clearly recognizable to the epigrapher. However, I would question the view that the “pictorial quality” is meant to “facilitate the direct comprehension of meaning.” I do not think that “direct comprehension of meaning” is an accurate description of what takes place at the level of the system’s signs. Traffic or road signs sometimes provide meaning without the mediation of words. An arrow that is bent to the right or left can proceed from icon to meaning given an adequate context. These could be called semasiograms (cf. Coe

⁸⁸The same would be true of communication through non-oral signing.

1999:18,27) because they do not indicate particular words but rather have meaning (Greek *semasia* = "meaning") directly without using words as intermediaries. For such signs, no conversion to words is necessary. Only the knowledge that signs of a certain general kind along the road refer to the upcoming road itself is required.

The situation with the signs of the Classic Maya writing system is quite different. Instead, what the pictorial quality of the signs facilitates is **learning** the phonetic equivalents of both the syllabographic and logographic signs. Meaning comes not from the signs themselves, but rather from being able to read and to recognize in context the phonetic equivalents of the language that are presented in written form. It is from this contextual reading that comprehension comes, and not from the recognition of the pictures portrayed by the individual glyphs. Recognition of the portrayed actions, items, or beings, if equated with their meaning, could even lead to a drastic misunderstanding of what is written. This is especially true in the case of glyphs used as syllables but also in the case of logograms whose pictorial value may point instead to homonyms or homophones.

It is also true that some of the signs, even logographic ones, are not detailed or distinct enough to ensure that one and only one interpretation would likely result when viewed by a Ch'olan speaker who was otherwise not schooled in or acquainted with the written language. Therefore, the possible phonetic values of the signs, even logographic ones, would have to be acquired through study, whether organized or not, as part of the process of learning the written language itself. The pictographic and iconic representations would aid in learning the phonemic and phonetic values, that is, the sounds written by both syllabograms and logograms. One would also need to learn the techniques such as those involved in not using parts of signs in some contexts and those used to write VC sounds after logograms with CV syllabograms, among others. Having learned the correct syllabographic and logographic values, the pictorial and iconic representations would still be of value when encountering the signs while reading, or even more critical, of reproducing them when writing. It is indeed in the area of built-in

or incorporated aids for learning and remembering the signs that the Classic Maya Hieroglyphic system excels, and not in the area of attempting to “facilitate the direct comprehension of meaning.”

Many logograms in the Maya script are pictorial or iconic and often depict more or less abstractly what might be a representation of what the intended word means. But it is, nevertheless, the word that means something, not the logogram itself. What is more, it is the sound or perceived sound written by the logogram that is ultimately the most important, and not the representation that calls forth that sound. They are not semasiograms. Instead, in this system the words mean something while the logograms and syllabograms write words. These signs often do not mean what they depict. They are not like textless road signs that mean something directly without words.

What is more, many syllabograms are also pictorial and are mostly acrophonically derived from the original word naming the object or action depicted, more or less abstractly, by that same syllabogram. This basic set of syllabograms is not derived from words chosen because of the weakness of their final consonants. But in various places and times, there are other signs that slide from logographic to syllabographic usage and back. Most often these are based upon words with weak final consonants (e.g. **B’AH/b’a**), but rarely others can be used as CV syllabograms by imaginative scribes as well.

This limited fluidity between logograms and syllabograms should only appear unimaginable to the epigrapher if the lines between the two types of signs are drawn too heavily. There is evidence of movement between CVC signs and CV signs, although it is limited enough to maintain the basic theoretical structural differences between each of them as a group. Although many epigraphers view the syllabographic set as having been drawn up and chosen at one specific time by one specific individual or group of individuals, the early texts leave open the distinct possibility that the set started slowly and expanded over a period of time as the need presented itself. Most of those early texts were written using logograms, some of which, such as T561 **CHAN** > *chan*, were most

often written with an accompanying syllabic glyph indicating that the word being written ended with an *n* consonant. These may not have even been viewed as syllabograms at first, although there is not enough evidence available yet to confidently decide that. At any rate, such phonetic complements clearly served that purpose early on.

It was likely from this early use as phonetic complements that a syllabary was eventually constructed. There are hints of this type of development in signs such as T25 **ka** based upon *kay* “fish.” Its first use and general adoption may predate the Greater Tzeltalan sound shift from Proto-Mayan /k/ and /k’/ to /ch/ and /ch’/. Other glyphs such as T87 **TE’** never really made a clean break from being viewed as a logogram used to write the homonyms *te’* “wood, tree, forest” and the numeral classifier *te’* used, for example, between month names and their numeral coefficients. Only later was a clear syllabogram for **te** adopted and it was not the same one at all (cf. Grube 1990:70-71; 1994:181). **TE’** continued to be used mainly as a logogram in titles, dates, and in the Primary Standard Sequence on ceramics throughout the whole Classic Period and beyond.

Homophonically used logograms, so-called “rebuses,” provide clear evidence that what a logogram depicts is sometimes not what is meant by the word that is being written. One glyph that occurs frequently in very early texts that is used homophonically is T757 **B’AH**. It depicts a type of gopher, *b’aah*, but is used most often in the extant texts to write other words meaning “image, self, face, head, and first.” This is evidence that even in the earliest texts, the purpose of the scribes in using the system was to write words that had meaning, not to offer signs that meant what they depicted. They were neither designed to replace words nor were they used in practice as if they did not require words as intermediaries to meaning. Shortening the trip from logograms to meanings by cutting out the mediation of words, even if only theoretically, does not lead to a clearer understanding of how the Maya script works. Instead, such theories only serve to provide ammunition for those who insist that such writing systems as the Maya script are somehow defective and can only provide limited access to messages that could otherwise be gained from a speaker of the language. Instead, the evidence shows that the Classic-

Period Maya writing system could be used to write anything said by a native Ch'olan Maya speaker living at that time. As a medium of transmission, it is undoubtedly on a par with alphabetic scripts.

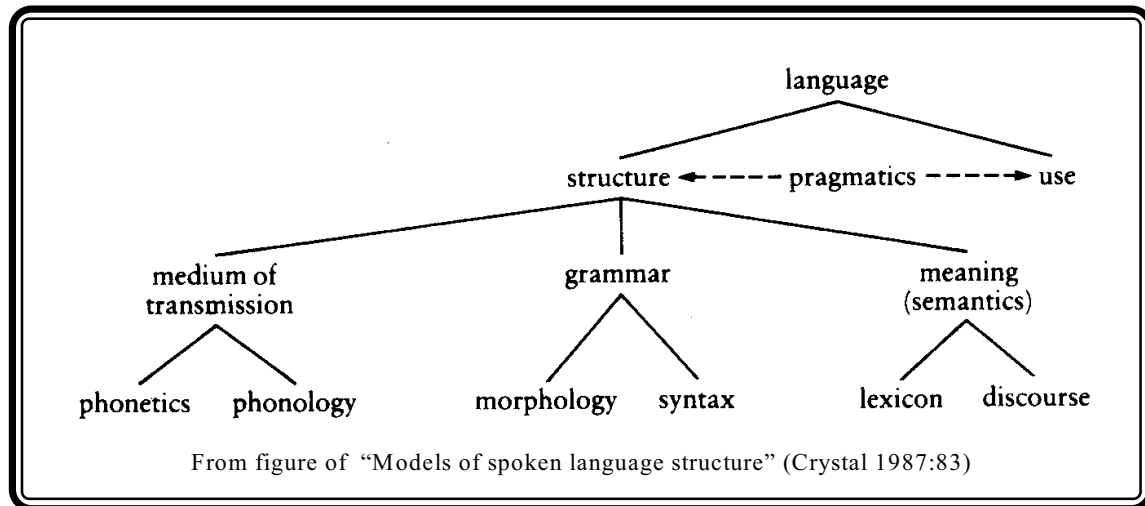


Figure 89. Working Model of Linguistic Levels by David Crystal (1987)

The chart in Figure 89 should help to clarify why problems arise from analyzing grammar and meaning at the level of signs alone. Just as sounds (“phones”) are the medium of the spoken language, so are signs (“graphs”) the medium of written language. Although there is not a perfect one-to-one correspondence between the phones of any language as spoken and the graphs of the same language as written, writing systems whether alphabetic, syllabic, or logosyllabic, employ conventional signs to express or communicate the same basic language. From an analytical standpoint, these sounds and characters transmit the language, but as signs alone they do not constitute the whole language in themselves. In relation to this chart of the spoken language, the signs used for the Classic Maya script belong to the medium of transmission. Just as the signs used in other writing systems, they are an alternate method of transmitting the language. As signs, they are not to be interpreted as falling within the realm of either grammar or meaning as is done by interpretations calling some of them “morphemes” (Knorozov

1967), “grammatical logograms” (Fox and Justeson 1984a; Mathews and Justeson 1984), or “morphosyllables” (Houston et al. (2001a).

In the case of the Maya logosyllabic system, this distinction is especially evident. On the one hand, there are very often several ways to write the same word and, to a lesser extent, sometimes even the same morphological affix or word. On the other hand, often the same signs are used to write different morphological affixes and even different words. An analytical approach that attempts to move both grammar and semantics over to the category of signs and medium of transmission, is doomed to fail at providing for a clear understanding of how the whole system works.

The glyphic signs of the Maya system represent and reproduce in a written medium the equivalent of spoken sounds to the extent that writing systems typically can and do. No writing systems, including alphabetic systems, represent all the sounds of the spoken language precisely, although some do so more closely than others. Often success in that venture has more to do with either openness to change or methods for control rather than the type of system employed. However, all such systems, to the extent they are successful, represent the spoken language accurately enough to enable easy and quick comprehension once the system has been learned. They also provide the means for allowing an impromptu oral recitation of a written text. They do not merely afford an approximate rendition or a point of departure for memorized or improvised storytelling. The Classic Maya writing system is no exception.

3 Selected Classic-Ch'olan Verb Morphology

The intent in this chapter is to present an overview of the most commonly encountered Classic Ch'olan verbal morphemes. Although not every verbal affix will be included here, most of them will. The amount of space allotted to each will vary depending upon factors such as the previous in-depth analysis already published elsewhere, the acceptance that analysis has received, the outstanding issues still remaining unaddressed, and the perceived need for reinterpretations of previous analysis. Among the goals will be to review existing analysis of specific verb forms, to provide greater in-depth analysis of how some forms function, to clarify the outstanding issues concerning specific verb forms, and to introduce new interpretations of some verb forms.

An underlying objective is to provide evidence bearing on the character and performance of the verbal system as a whole. Investigations into how a verbal system operates must involve central issues such as transitivity and intransitivity, voice, mood, and the realization of time and aspect. The analysis of several morphological affixes in this section will help set the stage for the investigation of the treatment of temporal relationships in Classic Ch'olan narrative in the next.

3.1 Brief History of Research into Classic Ch'olan Verb Morphology

3.1.1 “Discovery” of Verbs

As noted by Schele (1982:4), the existence of verbs (or “verbal glyphs”) in Maya hieroglyphic writing was recognized shortly after the system received renewed attention by scholars in the late 19th Century. Cyrus Thomas (1882) and Léon de Rosny (1883), as others after them, identified certain glyphs as verbs. Approaching the texts as a linguist, Whorf ([1942] 1956) identified what he surmised were verbs along with various verb forms and suffixes. But few of his actual decipherments were accepted by later scholars, mostly because he broke some signs down into smaller units than originally intended.

3.1.2 Locating Verbs Through Structural Analysis

During this early period, certain structural patterns were already being recognized in many of the texts. Although Whorf (1933; [1942] 1956) had found verbs in the expected positions for Yukatek (“Maya”), Kelley (1976:188) notes that Cyrus Thomas (1882:198-208) and Eduard Seler (e.g. [1887] 1990:107) had already recognized the structure although not its general applicability. While Kelley (1976:249-288) was by no means the first to structurally analyze a text – an accolade he attributed instead to Cyrus Thomas (1882) – he considered structural analysis of central importance to progress in future decipherment of the Maya hieroglyphs.

In the Codices, it seemed that the first glyph was often a verb. On the monumental inscriptions, the text was most often punctuated by dates, and what followed immediately after the date was almost always a verb. It was later demonstrated by Bricker and Bricker (1986) that even in the much later Dresden Codex, it is most often the dates that should be read first followed by the verb or copula-less subject and then continuing forward in spiral fashion with distance numbers (red colored in the Dresden) just as in the Classic-Period inscriptions. With the verbs identifiable at least tentatively by position, it became possible for the next important step to be taken.

3.1.3 From “Indicators” to Verbs and Verbal Affixes

Although Thompson (1950:50-52) did not generally accept the glyphic signs as phonetic, he nevertheless accepted in general the idea of verbal glyphs. For example, he identified two of them as having a special role to play in determining the “temporal direction” of the narrative, which for him consisted mainly of date information. He called them the “anterior date indicator,” ADI, and “posterior date indicator,” PDI (Thompson 1943). Still, he did not identify particular glyphs as representing verbal prefixes or suffixes (cf. Thompson 1950:40-41).

Knorozov identified what he called the past tense *-ah (-aj)* in the Codices. Although this reading had already been proposed by Seler (1902:698), Knorozov’s

phonetic approach opened the door to the decipherment of other verbal endings although at the time they were often interpreted as embodied in VC syllabic glyphs rather than usually made up of more than one CV syllabic glyph. Having accepted Knorozov's phonetic approach, Kelley (1976:143-161, 187-211) devoted a substantial amount of discussion to verbs and grammar. However, rather than providing a structured and comprehensive approach to either verbs or grammar in his published works, he instead summarized and evaluated the decipherment of various specific verbal and grammatical affixes. This was likely due to the generally limited stage of specific syllabographic and logographic decipherment at the time rather than to any suggestion that only a limited range of verbal morphology and grammatical constructions were represented.

3.1.4 Detailed Studies of Verbal Affixes in Monumental Texts

It was Schele's (1982) affix catalog which both raised the level of awareness about affixes present on verbs and also provided a reference database of many of the verbal compounds present in the monumental corpus. It both raised the level of awareness concerning the importance of these affixes and provided examples of their usage. Unfortunately for our purposes, one of the most common affix signs, T126, now accepted by most as syllabic **ya**, was not included in the indices. Schele dubbed this glyph the "Anterior Event Indicator," the "AEI," in her catalog. Although she considered it an affix, she did not view it as an integral part of the verbal morphology but rather as an independent temporal indicator (cf. Schele 1982:23-24).

Barbara MacLeod ([1983] 1987) in her Masters Thesis provided not only her proposals for possible morphological suffixes in the Classic texts, but also an extensive listing of verbal and derived nominal suffixes for all the Ch'olan and Yukatekan languages. Among those she correctly interpreted at the time were the two most common suffixes for positional verbs in the Classic texts. This work in its original form was referenced by Victoria Bricker (1986) in her *"Grammar of Mayan Hieroglyphs."*

Also important is MacLeod's (1984) discussion of verb morphology in the *Phoneticism in Mayan Hieroglyphic Writing* volume (Justeson and Campbell 1984) in which the various verbal suffixes were discussed in more detail. Fox and Justeson (1984a:58-62) in the same volume provide one of the few relatively early discussions of the possible linguistic equivalents of the T125/126 signs then referred to as the AEI. Although all these studies were very important for progress in understanding the specific morphology of the Classic verbal system, they were not yet attempts to provide an overall analysis.

Although not a hieroglyphic study, another extremely important step forward was provided in the same volume by Kaufman and Norman's (1984:89-109) summary of the verb morphology of the different Ch'olan languages along with their reconstruction of the likely Proto-Ch'olan verb system. Although they methodically avoided the data present in the hieroglyphic writing system, both their summaries of the verb systems of each language and their reconstructions proved to be very important for progress in the interpretation of the Classic period verbal affixes. Comparison of their findings with the results gleaned from quickly expanding decipherment especially of syllabographic signs began to produce insights into verb morphology that had not been accomplished by reference mainly to Yukatekan grammar.

Victoria Bricker (1986) in her *Grammar of Mayan Hieroglyphs* presented the first in-depth published attempt at a comprehensive grammar of all the Maya hieroglyphic inscriptions as well as the codices. Bricker's *Grammar* is useful for both her detailed summary of the morphology of Yukatekan and Ch'olan language families as well as her attempt to combine elements of both linguistic families into an overall synthesis exemplified in the morphology of the Classic and Postclassic texts. While some of her glyphic interpretations still stand today, others were hampered because specific syllabic glyphs were not yet securely identified. Another problem came from an approach that might have been too syncretic, as I have argued elsewhere (cf. Wald 1994b; 2004a). In an attempt to cover the broad scope of verb morphology from the Classic Period inscriptions

all the way to the Codices, she equated diverse elements with suffixes from several different Ch'olan and Yukatekan languages and incorporated them into the confines of one grand grammatical system. Nevertheless her thoroughness and detailed attention to the linguistic background of the language of the Maya hieroglyphs, makes it still today one of the required points of departure for research in the field.

Since Bricker's *Grammar* was published, a great amount of progress has been made both in glyphic decipherment and in the analysis of verb morphology. For example, already in his "Ten Phonetic Syllables" essay, David Stuart (1987) securely deciphered several syllabic glyphs that are important for interpreting verb morphology. Epigraphers and Linguists have also continued to identify and clarify the derivational and inflectional verbal affixes present in the Classic and Postclassic texts in the intervening years. Because the morphological affixes are of central importance for the present analysis, proposals for their identification and interpretation will be evaluated as each specific verbal form is addressed in this and the following section.

3.2 Transitive Verb Markers

To a large degree, the specific derivational and inflectional affixes that can appear on verbs in the Classic Maya texts coincide with some basic grammatical divisions that can be readily made among those verbs. The corollary to this is that the affixes taken by specific verbs are for the most part determined by their membership in a group that exhibits specific behavior and characteristics. One important high-level distinction in terms of morphology in the Mayan languages is that between transitive and intransitive verbs. It refers to the common distinction present in most languages between verbs that take two arguments, transitives, and those that have only one, intransitives. As a means of differentiation, this category distinction is more important for transitive than intransitive verbs. Differences within the intransitive verb group itself are often more important in determining their specific behavior and affixation. These intransitive verb groups will be distinguished later.

3.2.1 Root Transitive Verbs

Another high-level distinction that directly affects the choice of affixes is that between root (CVC) and derived (non-CVC verbs).⁸⁹ This distinction is operative among both transitive and intransitive verbs. Root verbs are those that are either transitive or intransitive by virtue of their root meanings and usage. They are also classified as root verbs because they can be used directly as verbs and can take inflectional affixes by virtue of their base forms without any additional derivational affixes. Finally, among the Mayan languages there is also another characteristic exemplified by root verbs. Their basic shape is that of a single-syllabled, CVC morpheme. Conversely, derived verbs consist of at least two syllables in addition to any other possible inflection. It is usually that second syllable or part of it that contains the derivational suffix.

Having made this apparently clear-cut distinction, mention must also be made of a third group that shares aspects of both root and derived verbs. Roots that begin with what are glottal stops or vowels, 'VC or VC depending upon one's chosen analysis, demonstrate irregular characteristics not in evidence with CVC-root verbs. Stated differently, just as CVC verbs, they consist of a single syllabled root. However, just as derived verbs, the affixes they take can differ from those taken by CVC root transitives. There are examples of 'VC/VC verbs that follow the same patterns of inflection and derivation evidenced by root transitives and examples of those that do not. It is important to note the route taken in each particular case. It is also important to note that some are irregular, espousing some traits more akin to root transitives and others more like derived, non-root transitives.

⁸⁹ Although there is a theoretical difference between CVC verbs and root or underived verbs, the nature of Mayan verbs is such that the two theoretically separate features almost always coincide.

3.2.1.1 CVC-Root Transitive Marker

There is direct evidence from Ch'ol and Ch'olti' for a $-V_l$ harmonic suffix as a status marker for root transitive verbs (see Figure 90). There is also somewhat less direct evidence from Chontal root transitives in negative contexts (cf. Knowles 1984:319; Keller and Luciano G. 1997:454). Kaufman and Norman (1984:100) reconstructed that suffix for Proto-Ch'olan. However, there was little backing in the late 1980's and early 1990's for an interpretation that matched the suffix suggested by the Ch'olan data.⁹⁰

Ch'olti'
hain achi cau ahauil Jesuxrto u colo on
 el mismo X°. n°. nos saluo o libro
 ["this same Jesus Christ set us free"]
 Morán (1935a:6)

Ch'ol (Tila)
Ti' māñā ixim jini winic.
 El hombre compró maíz
 ["The man bought corn"]
 Warkentin and Scott (1980:33)

Chontal (Negative)
mach kāk'uxu
 "I don't eat it."
 Knowles (1984:319)

Figure 90. Status marker for root transitive verbs in Ch'ol and Ch'olti'

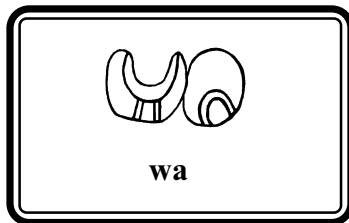


Figure 91. Transliterated syllabic value of T130

Many analyzed and transcribed the suffix as $-wa$, which corresponds to the transliterated syllabic value **wa** of the T130 sign as seen in Figure 91. This seemed an especially enticing possibility if one concentrated upon those examples written using a logogram for the verb root.

Disagreeing with this interpretation, Victoria Bricker (1986:126-29; cf. also 1995:75) transcribed the suffix as $-aw$ and stated that "the $-aw$ suffix represented the transitive imperfective [incomplete] status marker in the Mayan script." She based this on the presence of a transitive incomplete $-Vw$ suffix in Tojolab'al, which "is realized as $-Vw$ before vowels and as $-V$ elsewhere." However, at the same time Bricker (1986:126) also identified the regular

⁹⁰In fact, at the time, some thought that transitive verbs were not common and when they occurred, only very rarely contained the subject and object in the same sentence (cf. Hopkins 1997:84), although this opinion may have been partially due to a misinterpretation of the $-aj$ suffix at the time (cf. Hopkins 1988b:10).

“perfective [completive] transitive inflection” as *-ah* [-*aj*] rather than *-aw* or *-V_Iw* as well. Still, most epigraphers continued transcribing the T130 **wa** sign as *-wa* (e.g. Schele andLooper 1996:96,105), which confused the search for a linguistic explanation for the suffix.⁹¹

In 1994, I interpreted the suffix instead as *-V_I(w)*, with its vowel repeating the root vowel as seen in Figure 92. I took it then to be instead the transitive completive form (Wald 1994a). Except for the /w/, this vowel-harmonic suffix represented a virtual match with both Ch’ol in the west and Ch’olti’ in the east. My argument for interpreting the vowel of the suffix as harmonic rested in part upon syllabically written examples of transitive verbs whose root vowel was not /a/ as shown in Figure 92a, c, and d. Otherwise, it would not have been possible from examples such as Figure 92b to decide if the vowel came from the root or from the **a** of the glyphic syllable used to write the suffix. Also important were examples written with a logogram but followed by a syllabic sign that provided the expected harmonic vowel needed to precede the T130 **wa** sign as shown in Figure 92e.

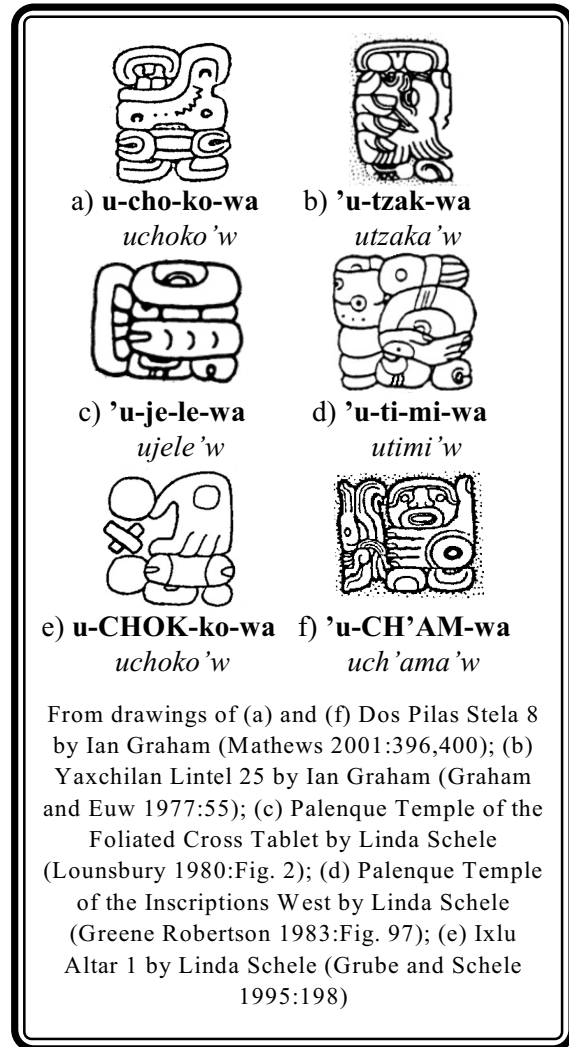


Figure 92. Various ways of writing root transitive forms as evidence for transcription

⁹¹It is likely not purely coincidental that most transcriptions of syllabic spellings that render final glyphic CV syllabograms as actual CV suffixes have been rejected over time.

This evidence is lacking in examples such as that in Figure 92f. The remaining question was why a syllabogram beginning with **w** was used given the apparent weakness of the Tojolab'al evidence.⁹²

In the meantime, John Justeson (1997:64) has pointed to work by Terrence Kaufman reconstructing for Proto-Mayan a plain status marker in **-o(w)* and an imperative in **a(w)* based upon its presence in several Maya language families. This represents a slight change from the reconstruction of ***o-V₁* or ***o-h* for the plain status of root transitives earlier (Kaufman & Norman 1984:92).⁹³ Kaufman (1989:Ch.3.A.3, p.1) in an unpublished work not available to me at the time, stated that both he and William Norman reconstruct the Proto-Mayan plain status for root transitive verbs as **-o-h / _# ~ -o-w / ...*. Kaufman (1989:Ch.3.A.3, p.2) further states that thematic suffixes for root transitives shifted from **-o-h/w* to **-a-(w)* in Western Mayan. So, although the /w/ only occurs in the modern languages in Tojolab'al as an optional part of the status marker, as noted by Bricker, Kaufman reconstructs it as present in the Proto-Mayan plain status marker for root transitives. It was then historically a part of the status marker for root transitives and this was still reflected in the Classic Period script.

Since both Ch'ol and Ch'olti' have a harmonic vowel instead of the Western Mayan **-a(w)* in their root transitive completive suffixes (see Figure 90 above), it likely became harmonic before the split between Eastern and Western Ch'olan. As I have argued elsewhere (Wald 1994a), there is good evidence in the Classic texts that the vowel of the suffix was also harmonic. As the examples in Figure 92 show, when root transitive verbs are written with syllabograms, the vowel of the second to last syllabogram, the one before the **wa** glyphic suffix, matches that of the root vowel. That is why the examples in Figure 92c-d, which transcribed are *uchoko 'w* and *utimi 'w*, are more important as

⁹²As already mentioned, Bricker (1986:126) noted that the /w/ was only present in Tojolab'al when the following word began with a vowel. In my study (Wald 1994a), I offered a possible solution based upon the phonetic character of the /w/ consonant and a theoretical writing system strategy. I no longer accept that solution as the most likely scenario.

⁹³Justeson makes reference to a work by Kaufman dated 1987 but that entry is not included in the References section of the volume.

evidence than those in Figure 92a-b, which write *uch'ama'w* “take, hold” and *utzaka'w* “grasp, conjure.”

Examples with a root vowel other than /a/ with the same vowel in the second syllabogram argue against simply concluding that the syllabogram **wa** might write *-aw* or *-a'w*, even though that may be the most likely suffix reconstructible for Proto-Western Mayan. Even if the motivation for using the syllabogram **wa** might have originated in this earlier form (suggested as a possibility by Barbara MacLeod pers. com. 1996), both the glyphic evidence and its realization as V_l in Ch'ol and Ch'olti' provide strong counter-arguments against transcribing it simply as *-aw* or *-a'w*.

But even more convincing evidence comes from the examples in Figure 92e-f. The roots of these verbs are written with logograms followed by two syllabograms. The final syllabogram is **wa** but the vowel of the preceding syllabogram is precisely the one needed to show a repetition of the root vowel. It is also possible that a harmonic vowel used at a root boundary is not meant to be pronounced or used in reading the word, as for example in the spelling of the positional verb *patwaan* as **PAT-ta-wa-ni**. However, that is not likely the case here. For the literate speaker of Classic Ch'olan, the decision to pronounce it or not would be obvious. Modern-day epigraphers have to rely on clues from the texts themselves, observed scribal writing strategies, knowledge of the descendent and other related languages, and linguistic reconstructions both backward from those languages and forward from Proto-Mayan reconstructions.

Verbs roots with an /a/ vowel cannot be used directly to answer this question because a syllabogram of the shape **Ca** would be used in any case, as it is in those seen in Figure 92a-b. Such examples, which make up the majority the transitive verbs represented in the texts, are of no explicit value in deciding whether the vowel of the syllabogram indicates an *-a'w* or a *-V_lw* suffix. However, they may provide indirect support for the *-V_lw* interpretation. If it were really true that, for example, the **ko** glyph in examples such as **u-CHOK-ko-wa** serves only as a phonetic complement, that the vowel is meant to be ignored, or that it signals a short root vowel, then one would expect to find

similar examples for verbs whose root vowel is /a/. I have not been able to find any such examples despite the large number of occurrences of root transitive verbs with an /a/ root vowel. In other words, there are no examples of transitive verbs written with a logogram that occur with an added **Ca** syllabogram between it and the **wa** syllabogram used to write the transitive status marker. This lends support to the argument that the intervening syllabogram of the shape **CV₁** is only viewed as useful for providing additional aid for reading when the vowel of the root is not /a/.

The argument just presented is further strengthened by examples of passive forms of the same verbs as those shown in Figure 92, as I noted elsewhere some time ago (Wald 1994a:102-105). One example each of a syllabographic and logographic spelling of the root of a passive form is shown in Figure 93. When writing passives with root vowels other than /a/, a **Ca** syllable is sometimes added following a logogram to ensure that the **a**-vowel of the thematic suffix or intransitive marker is

correctly read. This is done despite the presence of an **a** in the **ja** syllabogram used to write that suffix on passives in *-hC-aj*. Because the root vowel of the verb *chok* is short and is not /a/, the vowel of the syllabogram cannot be interpreted as an indication of the length of the root's vowel. Additional evidence indicates that it is not likely to be simply a phonetic complement either. Also, if it were intended to indicate the length of the root vowel, it would often contradict the information provided by such supposed phonetic complements on the transitive form of the same verb. If one takes the examples of both the transitive and passive forms of this verb into account, the only convincing way to explain the presence of a **ko** on the transitive examples and **ka** on the passive examples is

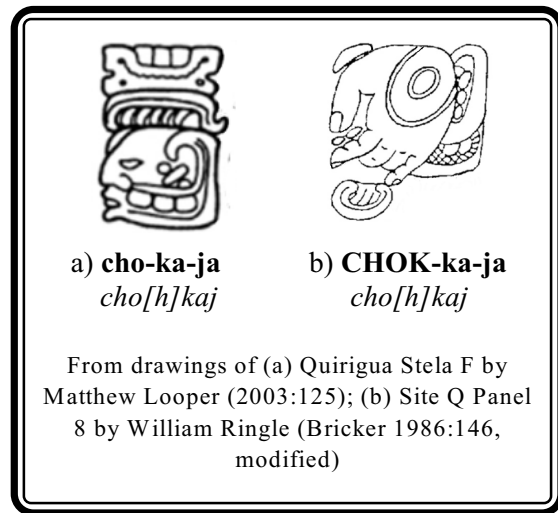


Figure 93. Passive forms with **ka** syllable before **ja** to indicate correct vowel

by interpreting the vowel of the syllabogram as a spelling of the vowel of the suffix in each case. The other suggested analyses cannot explain both cases using the same rationale. Thus, this technique serves as a means for some scribes to explicitly write the vowel of the suffix after a logogram rather than simply relying on the final syllabogram for that information whether it be **wa** for the root transitive or **ja** for the passive. At a minimum it reinforces the desired reading of the suffix on both of those verb forms.

3.2.1.2 Root Transitive Verb Markers Written with wi Syllable

Although the instances of root transitive verb markers written with a final glyphic **wi** instead of a **wa** syllable are rare, they do exist. Three of them are shown in Figure 94. This contention that the transitive verb marker can be written using **wi** has met with some disagreement since I first suggested it several years ago (Wald 1994a), but it still appears to be the correct way to interpret constructions such as these. They all occur in the eastern area of the Classic-Maya territory, namely at

Naranjo and Caracol. What is more, they occur on relatively early monuments, dating around the Middle Classic Period. The stelae from Caracol are dated A.D. 514 (9.4.0.0.0) and 534 (9.5.0.0.0). The latest current-event date on Naranjo Altar 1 dates to A.D. 596 (9.8.2.14.3). Since the dates are not late, it is more difficult to argue for a breakdown of

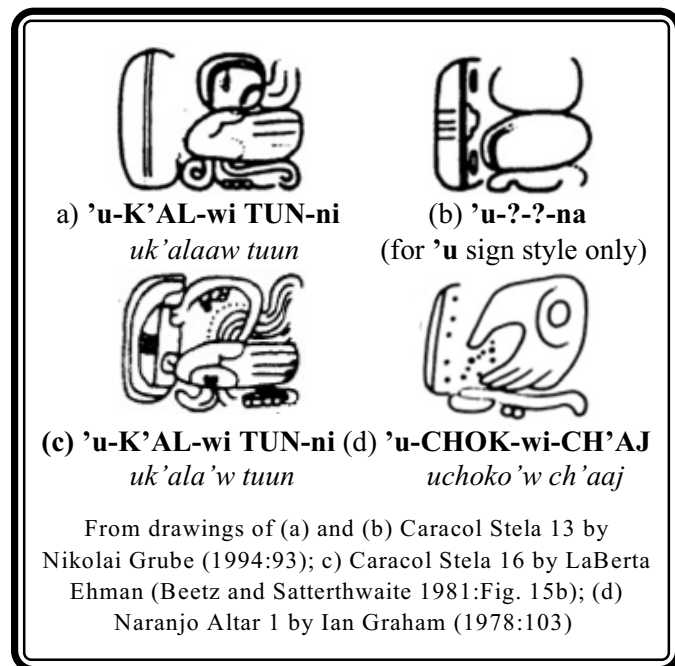


Figure 94. Rare examples of root transitives written with final **wi** syllabograms

an earlier system that used only the **wa** syllable for writing the root-transitive status marker.

As shown in Figures 94a and c, **'u-K'AL-wi TUN-ni** *uk'ala'w tun* means “he/she tied/wrapped the stone.” Figure 94b has been included here because it illustrates the shape of the syllabogram used to write the 3rd singular ergative pronoun on Caracol Stela 13. Because this monument is quite weathered, it does not show up clearly in some areas such as that in which Figure 94a occurs. However, there is no doubt that the first sign of each of them is indeed **'u**. The version of the **'u** sign in Figure 94c is slightly misdrawn, but there are two other examples of the same sign on Caracol Stela 16 that point clearly towards an **'u** transliteration for it as well.

Both the **wa** and the **wi** suffixes have already been briefly discussed in the context of phonetic versus morphemic interpretation of the signs. As was noted then and will be examined in more detail later (Section 6.5.4.1), similar variation occurs in the spelling of one of the antipassive forms which is also written with either a **wi** or a **wa** glyphic suffix. However, when writing the antipassive derivational suffix, the **wi** syllabogram predominates, whereas when writing the root-transitive status marker, the **wa** syllabogram occurs most of the time. It is quite possible that both the sharing of these syllabograms and the inverse relationship of their use in each instance may not be accidental.

3.2.1.3 Possible Root-Transitive Verb Markers in *-V_i* or Compound Nouns

A group of problematic examples of what appear to be transitive verbs written without the glyphic syllabogram **wa** is shown in Figure 95. The semantic and syntactic contexts of these lexemes appear to be the same as when this same verb occurs with the **wa** syllabogram. At least in the case of Figure 95a-c, they have a direct object, *ch'aaj*. Besides the context and the potential presence of a direct object, historical support for viewing these collocations as active transitive verbs comes from the descendant

languages Ch'ol and Ch'olti'.⁹⁴ Both of these languages preserve the Classic $-V_1$ 'w form except for the elision of the final -w and the vowel length of the root transitive marker. Support for this view also comes from some of the other Mayan languages that have also lost the /w/, with Chontal in its positive completive forms and Ch'orti' in all its forms no longer having a specifically reserved suffix for marking root transitive verbs. Even Tojolab'al preserves the /w/ only in prevocalic contexts in the incomplete (cf. Furbee-Losee 1976:131-132, Bricker 1986:126).

So, from a comparative linguistic viewpoint, transitive verb inflection written without a final -w might be quite understandable. Indeed, it may have been the writing system itself that preserved a final consonant longer than it actually was retained in everyday speech, which is a characteristic might share with most writing systems. With that in mind, it is quite reasonable to suggest that the 'u-CHOK-ko ch'a-ji example in Figure 95a could well be transcribed as *uchoko ch'aaj* and still be writing the root transitive verb with its status marker. The only difference would be that the status marker in these cases had evolved through

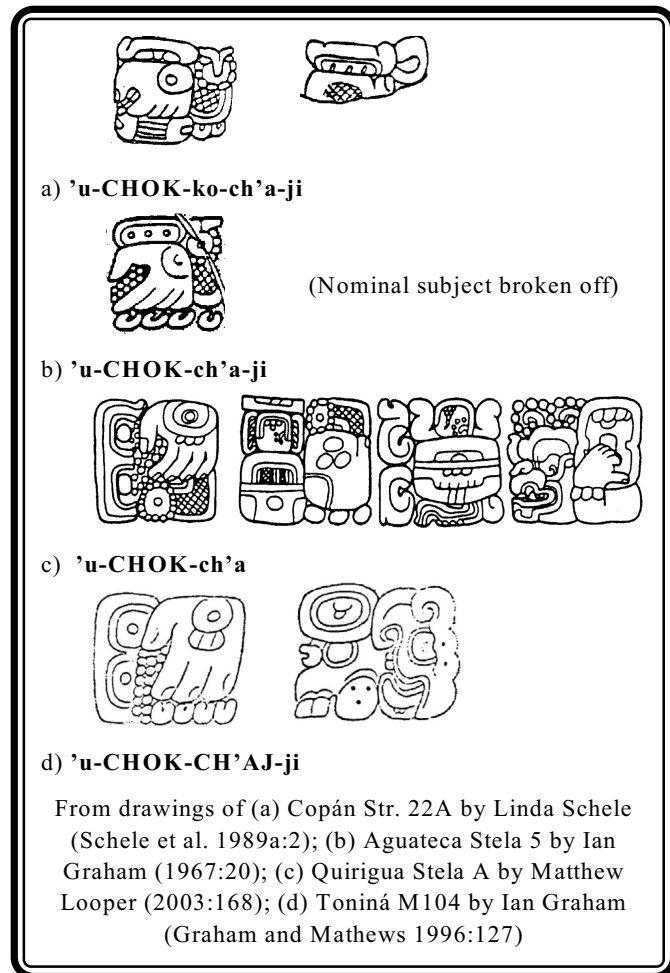


Figure 95. Possessed compound nouns in verbless sentences or transitive verbs without **wa**?

⁹⁴Also from the Chontal negative transitive incomplete forms as shown in Figure 90.

elision over time and place to $-V_l$ instead of $-V_l'w$. This would have been more likely in Late Classic times. Thus it may not be accidental that the example shown here occurs on a monument carved during the reign of *Yax Pahsaj Chan Yopaat* of Copán who ruled from A.D. 763 to about A.D. 810.

Despite this strong comparative evidence, one can also make what is perhaps a better case that the **ko** syllable is a phonetic complement for **CHOK**. As such, **ko** would be meant to signal the last consonant of the word and the vowel would not be explicitly pronounced. This would leave us with the transcription *uchokch'aaj* for **'u-CHOK-ko ch'a-ji** making it look more like a possessed compound noun than a transitive verb with its object.

3.2.1.4 Transitive Verbs without Root Transitive Status Marker

Although the occurrences of root transitive verbs in forms such as **'u-CHOK-ko** open the door to two conflicting interpretations, transitive verb or possessed compound noun, examples such as those in Figure 95b-d favor the second analysis. With **'u-CHOK-ch'a-ji**, **'u-CHOK-CH'AJ-ji**, and **'u-CHOK-ch'a** there are no syllabograms suffixed to the verbal root logogram that could suggest a transitive verb status marker was intended.⁹⁵ With the previous example of **'u-CHOK-ko** one could also resort to an explanation claiming either an under-spelling of the suffix or actual influence from the spoken language itself (as noted, for example, in Section 2.2.8.6.3 above). However, in such cases, it would be just the syllable supplying the final consonant that is not written,

⁹⁵ As already noted earlier, David Mora-Marín (2005:72-73, 81) has recently suggested that logograms used to write verbs that are not accompanied by syllabograms may themselves be interpreted as incorporating the required inflectional affixes. Whether or not this may be true of the pre-Classic Period, as Mora-Marín suggests, will not be addressed here. However, it does not seem to be true for the Classic Period texts which almost always expressly write such affixes when appropriate. Assuming that bare logograms can implicitly incorporate differentiating affixes on a regular basis would open an unnecessary Pandora's box. It would allow both contemporary readers or modern epigraphers to plug in the interpretation they desired rather than communicating the scribe's own specific message to the audience. Rather, writing such affixes may have been one of the driving forces behind the ever expanding use of syllabograms in the Maya writing system as Mora-Marín himself asserts.

e.g. **su-ku** instead of **su-ku-ni**. In the case of **'u-CHOK ch'a-ji** one would have to assume that both the vowel and the consonant of $-V_1$ 'w was underwritten. What is more, this assumption would also undermine the interpretation of the function of **wa** as signaling a $-V_1$ 'w suffix without the mitigating factor of a historical change in the actual form in the status marker leaving just the vowel $-V_1$ behind.

The proposal is, then, that the transcription for all three of these examples is *uchokch'aaj* "It was his/her drop/pellet throwing." Nominal compounds forming a verb root plus a noun are well-known in all of the Mayan languages including the Ch'olan language family (cf. Keller and Luciano 1997:425, Wichmann 1999:134; Warkentin & Scott 1980:22; and elsewhere). Several examples of similar constructions from Wisdom's Ch'orti' Dictionary (1950:708-9) based upon *chuki*, the Ch'orti' reflex of a verb

<i>chuki</i>	catch, take hold of, seize, hunt, take hold (as in . . . ?), cling (as a vine)'
<i>chuk te'</i>	[<i>te'</i> : plant] 'any epiphytic plant'
<i>chuk t'ur</i>	[<i>t'ur</i> : rabbit] 'rabbit-hunting'
<i>ah chuk t'ur</i>	'hunter, dog trained to hunt rabbits'
<i>chuk chay</i>	[<i>chay</i> : fish] 'fishing with net, trap, or by hand; martin pescador (fish-catching bird)'
<i>ah chuk chay</i>	'fisherman'
<i>chukchayk'in</i>	[<i>k'in</i> : time] 'season for net and trap fishing'
<i>chuk chay tar</i>	[<i>tar</i> : place] 'fishing spot or area'
<i>chuk chay te'</i>	'javello (wild tree found along stream banks)'
<i>chuk ch'a'n</i>	[<i>ch'a'n</i> : vine] 'any climbing vine'

Adapted from transcription by Brian Stross (2000) of Wisdom (1950)

Figure 96. Examples from Ch'orti' of compound nouns formed by prefixing verb to noun

common in the Classic texts are shown in Figure 96 (cf. also Pérez Martinez et al 1996:48-49). Verb roots prefixed to nouns in this way can form new nouns without the use of any inflectional affixes. As noted by Wichmann (1999:134) for Ch'orti' "Verb-noun compounds have two major semantic functions: they may describe a kind of action or a kind of object closely associated with a particular action."

In context the translation of the *uchokch'aa*j examples could be “It was the drop-throwing of” followed by the identification of the one performing the action, that is, the grammatical possessor of the action. The action indicated by using this verb root in connection with the noun *ch'aa*j refers to a very important ceremony conducted during the Classic Period especially on time-period ending dates. Because it is so common in the texts, it takes a large variety of forms. This type of compound, however, occurs with other classes of verb roots and stems as well.

Finally, there has been another suggestion made by Alfonso Lacadena that the examples such as those in Figure 95b and d represent the Tzeltalan form of the “perfect” inflection on transitive verbs. MacLeod in her article on the perfect transitive agreed with his view but did not limit its usage to the Toniná area. There are several reasons why I do not agree with this interpretation of these examples, some of which will become clear only later when I discuss the resultative aspect (Lacadena’s and MacLeod’s “perfect”) in much greater detail. Nevertheless, because such a view stands here in contradiction to my proposal that these examples represent possessed verb-noun compounds, this issue will be briefly addressed now realizing the some of the reasons will not become clear until after the detailed presentation of the nature of the resultative aspect in Section 4.

First, at the time Lacadena (pers. com) proposed that this could be the transitive “perfect” form, MacLeod had not yet made her proposal showing that the resultative (“perfect”) form was found throughout the Classic Maya area. The suggestion was that this form provided evidence of Tzeltalan being written at Toniná. Since it occurs freely elsewhere, including in the Dresden Codex (cf. Wald 2004a:56), this is not evidence that it is Tzeltalan, but rather simply that Classic Ch’olan still preserved this form that can be reconstructed for Greater Tzeltalan. In other words, the initial reason for thinking this might be the “perfect” because of its geographical location is moot.

Second, it should be noted that T136 **ji**, which is used in these two examples, “normally” occurs with four “loops” and sometimes three. It does appear frequently with only two loops but this is always in contexts in which it appears to be abbreviated, for

example side by side with T130 **wa** as in Figure 97a-b or where it shares space with **ko** as in Figure 95a above. From this information, one can conclude that when there is room and it is not abbreviated, T136 **ji** usually occurs with four loops. That lessens the force of a possible argument that **ji** in Figure 95b above is necessarily a glyphic suffix for both **CHOK** and **cha** simply because it is written below the **CHOK** hand.

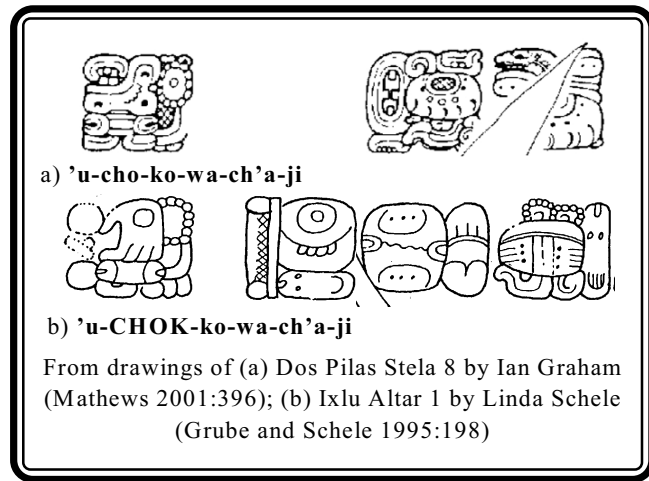


Figure 97. Effect of space considerations on sign size

However, there is a third, more important point to make. I suggest instead that in the case of Figure 95b, **'u-CHOK-ch'a-ji**, the syllable **ji**, written in its full form, serves to write the final consonant of *-ch'aaj*. In this case, *-ch'aaj* is the second part of the compound word *chokch'aaj*. That is why the **ji** syllabogram covers the whole bottom of the glyph block. It is the last syllabogram in the whole glyph block, but more important, *-j* is the final consonant of the whole word. The **ji** syllable does not belong at all between the two parts of the compound *chokch'aaj*. The explanation for the construction in Figure 95d **'u-CHOK-CH'AJ-ji** is similar. It is the whole *chokch'aaj* compound that the **ji** follows here. However, in this case, both the *chok-* and the *-ch'aaj* parts of the compound noun are written with logograms. The **ji** syllable is meant to be read after the **CH'AJ** logogram and not after the **CHOK** logogram. Indeed, the scribe hints at this by drawing the drops extending out of the **CHOK** hand and descending all the way down below the hand to the left of the **ji** syllabogram.⁹⁶

⁹⁶The drops in hand are sometimes interpreted as a logogram for the drops **CH'AJ** > *chaaj* rather than just part of the **CHOK** > *chok* “throw” logogram. Almost every possible combination of the hand and drops occur in the texts, not least because this verb and noun combination occur so often. Thus, there are
(continued...)

The example in Figure 95c is also important for this argument precisely because there is no **ji** syllable present at all. The only really convincing suggestion here is to interpret the form as a possessed compound noun *uchokch'aaaj*. Thus, this example is solid evidence that such a compound was actually used. That, in turn, makes the validity of such an interpretation in the other two cases more likely as well. This is true even though there may be a question as to the transliteration of signs that write the *-ch'aaaj* portion of the compound. Some might read T93 **ch'a** instead as the logogram **CH'AJ**. Doing so would not affect the argument just made at all. However, in this case, I interpret the drops as a logogram for **CH'AJ** and the **ch'a** syllable as a phonetic complement for the **CH'AJ** logogram: **'u-CHOK-ch'a-CH'AJ** *uchokch'aaaj*.

There is precedence for this type of construction. Figure 98 shows an example in which the **ch'a** sign precedes the **CHOK** sign altogether and curves into the hand sign at the point where the drops usually fall. Although in this example **ch'a** precedes the first part of the lexeme, it is still meant to be read after **CHOK**. It is not possessed but rather simply states, in a verbless sentence, that “on 7 *Ajaw* . . . 3 *O'hl*

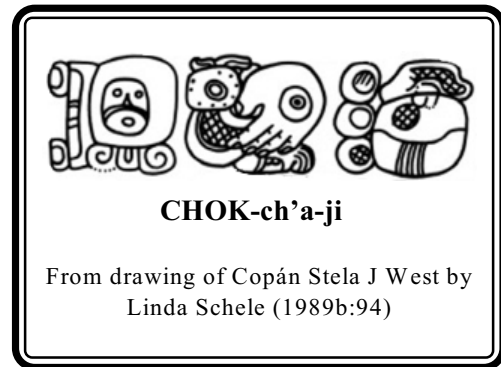


Figure 98. **CHOK** sign preceded by **ch'a** sign

(*Kumk'u*), on the half-score period, there was a drops throwing”: *chokch'aaaj*. The **ji** sign is placed right below the **CHOK** logogram. However, the **ji** is not meant to be read right after **CHOK** but rather after the **ch'a** syllable. It is **ch'a** which follows **CHOK** in the order **CHOK-ch'a-ji**. This is not a transitive verb and there is no need to suppose that transitiv' verb inflection could be used on an intransitive verb. The **ji** syllable simply writes the last part of the compound noun.

⁹⁶(...continued)

examples of the hand without drops but with *ch'aaaj*, drops in the hand with *ch'aaaj*, the hand with drops but without *ch'aaaj*, the hand with drops and only the **ji**, the hand with drops and **cha** but no **ji**, and more.

Fourth, *chok* “to throw” is not one of the verbs that normally occurs in transitive resultative (“perfect”) constructions. That is because the resultative inflection is primarily tied to use with a set of verbs bearing specific semantic qualities. Most often, but not always, these are derived, instead of root, transitives. The verb root *chok* is not a member of that semantic set, mainly because of the strong sense of physical action that it carries, which is not typical of resultatives. Verbs that usually take the resultative inflectional suffix tend to stress more the stative result of an action rather than the action itself. For further explanation of this characteristic and the evidence for it in Tzeltal and Tzotzil, please refer to Section 4.2 below.

3.2.2 Non-CVC Transitive Verbs

There are several different types of roots from which transitive verbs can be derived. Only those derived from nouns and intransitive verbs will be discussed here. There are also several different suffixes that can derive transitives. Only a couple will be reviewed here. Transitives derived from positional roots will be discussed later along with other forms of positionals. The purpose here is not to provide an exhaustive study of these forms, but simply to establish a framework within which further points concerning tense and aspect can be made later.

3.2.2.1 Derivational suffix *-a*

Figure 99 shows two different lexemes containing the root *tz'ihb'*. As Alfonso Lacadena (2004:182) has noted, it is important to distinguish the form shown in Figure 99a, which is the most common form appearing in scribes' signatures, from the form shown in Figure 99b. While the former is written specifically as *'u-tz'i-b'i* the latter in Figure 99b is written as *'u-tz'i-b'a*. As Lacadena argues, they are to be transcribed as

utz'ihb' and *utz'ihb'a* respectively. The word *utz'ihb'*, written as **'u-tz'i-b'i**, is a possessed noun which, when used in a sentence without a verb, can be translated as “It was his/her writing/painting” or “It was the writing/painting of . . .” When written **'u-tz'i-b'a** *utz'ihb'a*, it is a transitive verb meaning “he/she wrote/painted it.” The suffix *-a* is one way to derive transitive verbs from nouns in the Classic-Period texts.

Besides explaining the reason for the existence of two forms of scribal signatures, the interpretation of **'u-tz'i-b'a** as spelling a verbal form receives corroboration from similar forms attested in all of the Ch'olan languages. Besides those mentioned by Lacadena, it is also reflected in Acalan Chontal where the derivational suffix *a* occurs before the *-bel* of the possessed gerund serving as an incompletive: *caçibabel* (*katz'ib'ab'el*) “my writing” (Paxbolon et al. 1614:169.11).

3.2.2.2 Derivational suffix *-i*

Another verb that is very common, from the early Classic inscriptions all the way through to the Dresden Codex of Post-Classic Times, is *uchab'i* or *ukab'i*. Despite this long pre-Columbian history, it has not been attested in any of the Colonial or Modern Ch'olan languages. It is, however, present in Colonial and Modern Tzotzil as *chab'i*. In colonial Tzotzil (Laughlin 1988:184-5) it means “govern, guard, watch over.”

This Tzeltalan form in *chab'i* should be clearly distinguished from other derived forms which have a different meaning although derived from the same root *chab'*. Although not attested as such in the Classic inscriptions, this root is also analyzed in

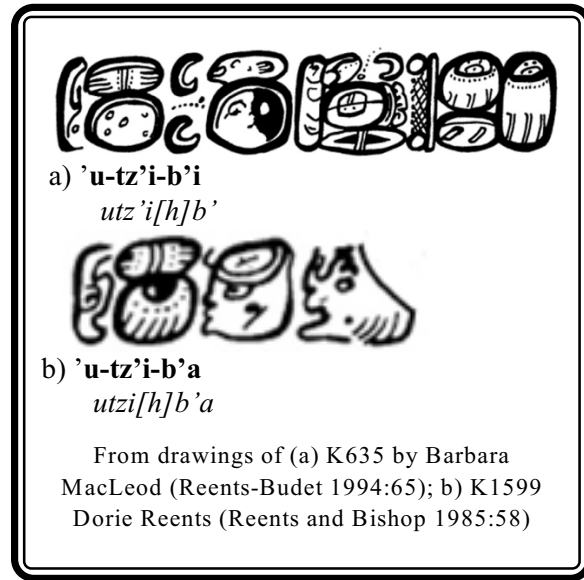


Figure 99. Noun versus derived transitive verb

Colonial Tzotzil as an intransitive verb in the form *chab'aj* and as a transitive verb *chab'an* both with the meaning “cultivate, plow.” But when it means “govern, guard, watch over” it always includes the derivational suffix *i* after the root, even, for example, in nominalized forms such as *chab'iel* “custody” or *chab'iej* “possession” (Laughlin 1988:185; cf. also Delgaty and Ruíz Sánchez 1978:36 for modern Tzotzil). So although likely derived from the noun *chab'* (*chob'* in Tzotzil) “earth, soil, field,” the meanings differ depending upon how the word is derived. According to Kaufman (1972:141) and Haviland (1988:85), the suffix *-aj* (*-Vj*) derives intransitive verbs from nouns. However, Kaufman (pers. com. 2003) now thinks that this suffix may be better analyzed as *-a* for deriving a transitive verb from the noun and the *-j* as deriving an antipassive from the transitive verb, as will be discussed later. Kaufman (1972:141) also reconstructs **-in* as a suffix for deriving transitive verbs from nouns in Proto-Tzeltal-Tzotzil but notes the variants *-n*, *-an*, and *-on* as allomorphs of the same suffix in Tzeltal (Kaufman 1971:50). In addition, Kaufman (1972:140) identifies **-an* as a suffix that derives transitive verbs from other transitives for Proto-Tzeltal-Tzotzil which is also a possible interpretation for *chab'an*.

a) <i>buquin</i> > <i>b'uk-in</i> “cubrir con ropa” (Morán1695:95) (“cover with clothes”)	
< <i>b'uk</i> “ropa” (“clothes”)	
b) <i>atzami</i> > <i>atz'am-i</i> - “salar”	(Morán1695:163) (“to salt”)
< <i>atz'am</i> “sal” (“salt”)	
c) <i>etoqui</i> > <i>etok-i</i> “acompañar”	(Morán1695:163) (“accompany”)
< <i>etok</i> “amigo” (“friend”)	
	(Adapted from Sattler (2004:374))

Figure 100. Colonial Ch'olti' derived transitive forms in *-i* and *-in*

The *-i* in *chab'i* also likely derives transitives from nouns, similar to the way *-a* does for *tzihb'*. Theoretically, it could be an allomorph or shortened form of the *-in* derivational suffix identified by Kaufman. Mareike Sattler (2004:374) in her analysis of Morán's *Arte de la Lengua Choltí* (here “Ch'olti'”) points out an example of *-in* deriving

a transitive verb from a noun and two examples of *-i* doing the same (see Figure 100). Haviland (1988:85) also identifies a usitative suffix *-in* that derives transitives from nouns in Colonial Tzotzil. One example that Sattler includes which has the *-in* suffix, *buquin* (*b'uk'in*) “cover with clothes,” is clearly usitative in meaning. Although, *atz'ami* “salt” might also be interpreted in that way, *etoki* “accompany” is much harder to explain as a usitative. The example brought by Haviland is *nain* “reside in, use as a house.” In the case of *etoki*, this interpretation seems strange and is likely instead to be a transitive derived simply by the suffix *-i* instead of a usitative etymologically related to *-in*. The same is likely true of *chab'i*. It appears best to analyze the *-i* in *chab'i* as a suffix separate from *-in* that is used in a way similar to the *-a* derivational suffix just described above for *tz'ihb'*. One reason is that the meaning of *schab'i* in Tzotzil and *ukab'i* in the Classic Ch'olan texts does not seem to reflect a usitative connotation at all. Another, even more important reason is that neither in Colonial Tzotzil nor in the Classic Ch'olan texts is this verb ever attested with an *-n*. In both sets of data there is ample opportunity for a potential *n* to intervene between the stem and additional affixes. Yet it never does.

The verb *chab'i/kab'i* has not yet been found with the root spelled syllabically in the Classic-Period texts, so there is some disagreement as to its correct transcription with either a *ch-* or *k-* beginning consonant. T526 is used as the day name *Kab'an* and also likely has the value **KAB'** in other contexts as well. However, this view seems to ignore the expected *k > ch* sound change of Greater Tzeltalan.

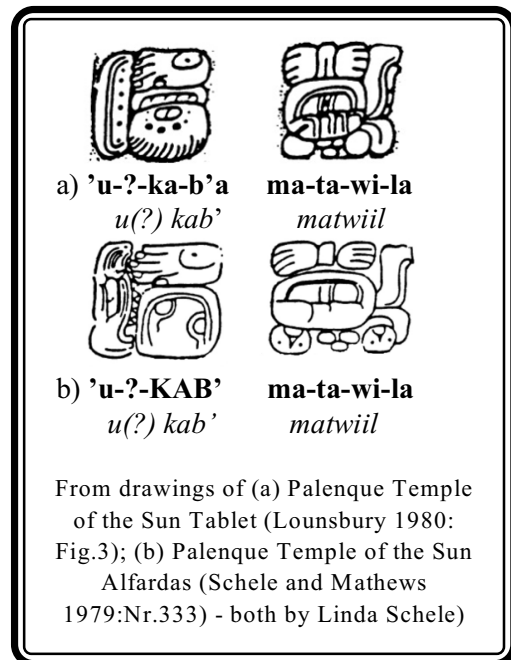


Figure 101. Evidence for **KAB'** value of logogram T526 outside of day sign context

Strong glyphic evidence in favor of **KAB'** instead of **CHAB'** comes in the form of a syllabic spelling **ka-b'a kab'** appearing in a the same context as T126 both of which are shown in Figure 101. This would seem to indicate that, at least at Palenque, the **KAB'AN** “earth” glyph is indeed **KAB'** outside of day-name contexts. The glyph block in Figure 101 may in fact be writing an idiom related to Chontal *pānkāb'an* listed by Knowles (1984:448) as “*pān=kāb-a(n)/iv/to be born*” (see also Keller & Luciano G. 1997:187).⁹⁷ If this suggestion is correct, the two passages in Figure 101 and others like them could be transcribed *upankab' matwiil* “he [one of three Palenque gods] was born at *matwiil*.” However, the “hand” logogram in this compound has not yet been securely deciphered because it lacks supporting evidence from usage in other contexts.

Chontal	(Knowles:1988:426,446,474)	
<i>kab-a</i>	n3a	agricultural plot
<i>kab-en</i>	aj	dirty
<i>kab-il</i>	aj	dirty, land
<i>tz'in kab-a</i>	n3a	yucca field
<i>pan=kap'</i>	nl	earth, on the earth
Ch'olti'	(Morán 1935c:63)	
tierra blanca	tierra blanca con que ilan	
	<i>zahcab</i> ; tambien la comen	

Figure 102. *Kab'* instead of *chab'* in Chontal and Ch'olti'

Nevertheless, the Ch'olan languages provide strong evidence for **KAB'**. Most noteworthy is that *kab'* means “earth, soil, field, land” in Acalan and Modern Chontal as noted in Figure 102 (Smailus 1975:148; Knowles 1988:426; cf. Justeson et al. 1985:14, 20). Also, there are compounds formed with *kab'* in Morán's “Vocabulario,” for example, *sahkab'* for “white earth with which they spin; they also eat it” (Figure

102). Another is found in the entry “muy de mañana . . . *chacpazcab* . . . // *chak pas-kab'* 'early in the morning'” (Morán 1935c:45; Stross 1990).

⁹⁷I believe the suggestion of this connection was first made by Barbara MacLeod (1991:2). Note also that the first part of this compound is likely related to the intransitive verb *pāmo* meaning “to be met, to appear” (cf. Keller and Luciano G. 1997:186).

3.2.2.3 Non-CVC root verb *il* “to see”

Another verb that appears very often in the Classic texts, because of the importance of its political and religious implications, is *il*. Although its basic meaning is related to “see,” its meanings vary over a broad range as can be seen in Figure 103.⁹⁸ It is also not a CVC verb in the strict sense because it begins with a glottal stop. Verbs that begin with a glottal stop /ʔ/ and the glottal aspirant /h/, tend to be irregular and often take suffixes other than the usual ones taken by CVC verbs just as do verbs derived from nouns. The precise forms they take, however, are not always predictable.

Ch’olti’	(after Morán 1935a; 1935c)
<i>il, ila</i>	ver, parecer, cuidar, ver misa, (“see, appear, care for, see/attend mass”)
Ch’orti’	(Wisdom 1950:484)
<i>ira</i>	“see or look, look at, pay attention to, examine, decide, find out”
Ch’orti’	(Pérez Martinez et al. 1996:75)
<i>iran, uwira</i>	“ver, distinguir, irar, estudiar, calcular, tratar resolver, cuidar, vigilar” (“see, distinguish, ?, study, calculate, try, resolve, care for, watch over”)
Acalan Chontal	(Smailus 1975:146)
<i>il-an</i>	“ver” (“see”)
Chontal	(Keller and Luciano G. 1997:116)
<i>iran</i>	“examinar, revisar, cuidar, vigilar, mirar, ver” (“examine, review, care for, watch over, look at, see”)
Ch’ol	(Aulie and Aulie 1998:46)
<i>ilan</i>	ver, visitar, reconocer, probar (el corazón)
Ch’ol	(Hopkins and Josserand 1988g:’7)
<i>ilal n<v</i>	appear(ance); parecer
Colonial Tzotzil	(Laughlin 1988:146)
<i>il</i>	experiment, find what one was looking for, have a vision, see
<i>ilel n<v</i>	appearance, form, style
<i>iløj iv</i>	see
<i>ilolaj</i>	witness (testify?)
Tzeltal	(Slocum et al. 1999:46-47)
<i>ilel</i>	ver, mirar (“see, watch”)
<i>ilel -ba</i>	tener cuidado

Figure 103. Irregular derived transitive verb based upon *il* root

⁹⁸Morán (1935a:10) provides us with some connotations from Ch’olti’ that may fit well in some contexts. One of them is “attended” as in “*inu illa missa* I saw (attended) Mass”. Another is: “*illa* to see, *inu illia (f) inu ilohel* what I see, or is my duty to see or take care of” (Morán 1935a:4).

The root *il* takes an /a/ thematic vowel in many of its forms in all of the Ch'olan languages as can also be seen in Figure 103. Although Kaufman and Norman (1984:121) note the presence of the final /ä/ as a Ch'olan innovation, it is also present in several other languages such as Jakalteko (Méndez Cruz 1997:128 [*Popti*"]); Ramírez Pérez et al. 1996:95), Poqom (Santos Nicolás and Benito Pérez 1998:191), and Q'anjob'al (Diego Antonio et al 1996: 81; Montejo and Nicolas Pedro 1996:79ff.).

Although its attested forms are more varied in the Classic texts than those of *tz'ihb'a* and *kab'i*, most of them appear in a limited set of contexts. The usual context is one of "being present, attending, watching over." "Witnessing" in the sense of testifying or bearing witness is present in Colonial Tzotzil. The translation "witness" in the sense of "seeing" has gained in favor among epigraphers since it was used by Schele (1987:4) in one of the Copán Notes.⁹⁹ However, in the context of period endings, the sense of the word seems to be much more "to watch over" or "to care for" than "to witness." As is most often the case, the ruler is given both the duty of and the credit for watching over and taking care of the polity during his reign and that is commemorated at period endings. It is not the "worship of time" that is reinforced by the celebration of period endings but rather the performance of the kingly duties. That this is true is reinforced by two other verbs that also appear in

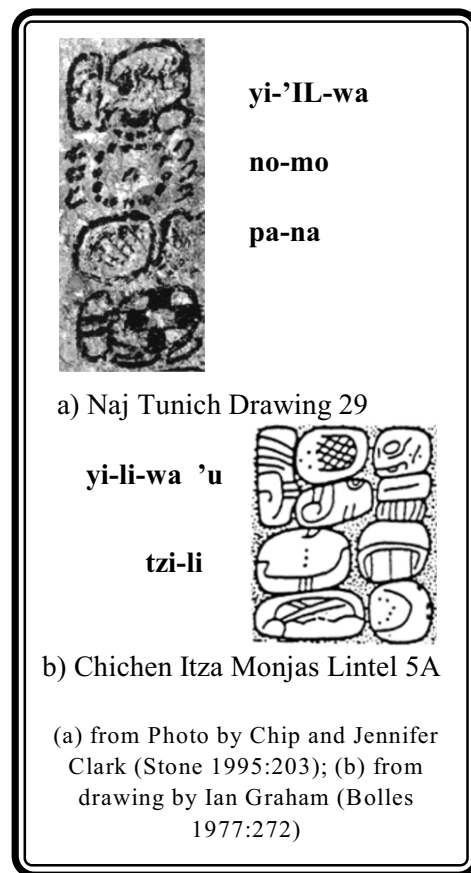


Figure 104. Possible transitive forms of *il*

⁹⁹I am not certain that this was indeed the first time "witness" was used as a translation for this verb in such circumstances, but it is the first time of which I am aware.

such contexts sometimes in parallel with *il*. They are *ukab'i* “to oversee, guard, take care of,” and *tz'akb'u* “put in order, govern.”

The verb *il* does not appear often with just a transitive status marker in the Classic-Period texts but rather with various other inflections and derivations. Some of those forms will be discussed later under the specific topics that match their inflectional suffixes. There are several examples of the root *il* or stem *ila* that do indeed take the usual glyphic suffix expected on root transitive verbs. One of them from a Naj Tunich cave painting is shown in Figure 104a. It is most likely **yi-'IL-wa** followed by **mo-no pa-na** *mon pan* and the name of the nominal subject. It is likely that *mon pan* names the location although it is much less certain that it actually refers to the *Mopan* area or river.

Figure 104b shows one of several occurrences of the same word spelled syllabically as **yi-li-wa**. In all of them, it is followed by **'u-tzi-li** *utzil*, which is likely a location, and then by the nominal subject of the sentence. Following the usual reading strategy for root transitive verbs, the glyphic **wa** sign here would seem to indicate a transcription of *yili'w*. However, if one took the position that the verb *il* is accompanied by *-a* in Ch'olan unless shortened for phonological reasons, **wa** could be indicating an *-a'w* suffix, in this case resulting in *yila'w*. In addressing the example in Figure 104a, MacLeod (2004:300) has left open the possibility of either *y-il-iw* or *y-il-aw* although she does opt for *y-il-i-w-Ø* for the Chichen Itza examples.

In the case of **yi-'IL-wa** at Naj Tunich, an example written with an inserted **'a** would resolve the issue as it does in the case of several other forms which indeed include such an inserted vowel. Since it does not simply repeat the root vowel, its presence cannot be attributed to phonetic complementation as would a **li** sign. On the other hand, the presence of **li** instead of **la** in **yi-li-wa** leaves it open as to whether the **i** of **li** or the **a** of **wa** should be used in the pronunciation or transcription. Although the case for *yili'w* seems stronger, several examples of syllabograms written to spell the second consonant for which the vowel was not to be used in the final transcription have already been shown in the previous section.

One more source of evidence should be considered. At first glance, *yili* appears to be a perfect match for the form that occurs four times in the Acalan Chontal of the *Paxbolon-Maldonado Papers* (see Figure 105). Although the incomplete form in Acalan and Modern Chontal is *yilan*, the completive form is instead *yili* which seems to partially match the Las Monjas examples. For the discussion here so far, the match seems to be in a critical spot suggesting a choice of *-i'w* over *-a'w*. However, this similarity is likely only superficial. The *V_I* harmonic vowel is part of the *-V_I'w* root transitive status marker for Classic Period transitive verbs. The *i* of the Acalan Chontal verb is the completive suffix taken by almost all verbs whether transitive or intransitive, CVC or non-CVC. The same situation occurs in Chontal with, for example, the derived transitive

Acalan Chontal	
<i>tali yili ma yuual ukaxelob</i>	(Paxbolon et al. 1614:162:8-9)
it came about, they saw , then, their not crossing	
<i>cahi uthanbel than tubaob chamel uchelen ukal ya tupuçikal ma uyili xpstianoil hun tzuc anel</i>	(Paxbolon et al. 1614:163:17-19)
it began, his speaking words to them, dying, he is doing it because in his heart he did not witness christianity, another way of existing	
<i>bache utz cab uyili yai tuba ototel</i>	(Paxbolon et al. 1614:168:32)
how good (was) the land he saw there for their houses	
<i>ybacheyoco tiil cab yithoc tel chutelal utelal uyili</i>	(Paxbolon et al. 1614:169:4-5)
how quite good (was) the land with the cedar trees he saw	

Figure 105. Occurrences of *yili* in Acalan Chontal document

tz'ib'ä. Although the form is *tz'ib'än* in the incomplete, the completive suffix replaces the *ä* in the completive leaving *tz'ib'i*. This is critical to note because the *ä* in the case of *tz'ib'ä*, as just discussed, is a derivational suffix. Thus the completive suffix of Acalan

Chontal actually replaces or elides that derivational suffix without changing the meaning or status of the lexeme.

This strategy is also apparent in Modern Chontal. These two entries from Keller and Luciano G.'s (1997:450-451) grammatical summary make the comparison clear. The expected /ä/ is present in the incomplete: “*mu' cä tz'ibän* ‘lo estoy escribiendo’,” “I am writing it.” But although the /ä/ is theoretically present to derive the transitive verb from the noun, it is instead replaced by the /i/ of the completive suffix: “*acä tz'ibi* ‘acabo de escribirlo’” “I just wrote it.” So, it is highly doubtful that the *i* in Chontal *yili* is at all related etymologically to the *i* of the possible *-iw* in the **yi-li-wa** occurrences at Chichen Itza or the **yi-'IL-wa** occurrence at Naj Tunich.

This basically leaves open the decision favoring either *yili'w* or *yila'w* in these examples at the present time. Because *il* does not otherwise behave as a root transitive verb, perhaps *yila'w* has the edge. Although **wa** quite regularly writes a harmonic vowel, that does not answer the question whether it causes the repetition of the root vowel or that of the *a* which usually follows the root. It will probably take an attested example such as ≠***yi-la-wa** or ≠***yi-'IL-'a-wa** to securely decide the issue.

3.2.2.4 Lack of *-n* Incomplete Suffix on Derived Transitives

As with the root transitive verbs, only a few of the most common non-CVC transitive verbs attested in the Classic Inscriptions have been addressed here. A few others will be discussed later, for example, transitive verbs derived from positional roots. Transitives inflected for resultative (also known as “stative” or “perfect”) aspect will also be specifically addressed in great detail later.

But before leaving this general overview of transitive verb inflection in the Classic Period texts, a very important observation made by Stephen Houston should be mentioned. He observed that

There is not a single glyphic instance in which any perceived difference exists between completive and incompletive aspect in active transitives. Not coincidentally, this absence of differentiation is attested in Cholti' (Houston.1997:296)

Although Houston was not actually referring to precisely the same forms in the Classic-Period inscriptions as will be discussed later, his observation will nevertheless prove critical to points that will be made in this study. There is indeed no morphological difference between incompletive and completive forms of active transitives in Classic Ch'olan. However, it will also be argued that his statement does not go far enough in its characterization of the Classic-Period texts although it goes too far in regard to Ch'olti'. On the one hand, this characteristic is by no means limited to transitive verbs in Classic Ch'olan, with the proviso that Houston does not have the same forms in mind when he speaks of incompletive and completive aspect affixes. On the other hand, it will also be argued that his statement has gone too far for Ch'olti' because Ch'olti' clearly differentiates between the incompletive and completive aspect forms for **derived** active transitives. Incompletive forms of derived transitives in Ch'olti' take an *-n* suffix. Derived transitive verbs do not take this *-n* incompletive suffix nor any incompletive suffix at all in Classic Ch'olan. This is, in fact, one of the major differences between Ch'olti' and Classic Ch'olan.

3.3 Intransitive Verb Markers

As mentioned earlier, just as in the case of transitive verb morphology, there is also a high-level distinction between root (CVC) and derived (non-CVC) intransitive verbs that directly affects the choice of affixes. Root intransitive verbs are those that are intransitive by virtue of their root meanings and usage. As such they can be used directly as verbs without derivational affixes and can take inflectional affixes by virtue of their base forms. Also, just as with transitive verbs, so also in the case of intransitives, there is

a third group made up of those that begin with glottal stops or vowels, 'VC or VC, depending only upon one's chosen approach to interpreting glottal stops. In the case of intransitive verb roots, there seem to be more 'VC/VC intransitive verbs that are inflected in the same way as strictly defined CVC verbs than in the case of transitive verbs. Nevertheless, the possibility of variant or irregular forms in the case of 'VC/VC intransitives should be kept in mind.

3.3.1 CVC Intransitives

3.3.1.1 Issues Raised by Glyphic Spellings of CVC Intransitives

Figure 106a and b both show examples of CVC intransitive verbs from the Classic Period inscriptions. When spelled with syllabograms, the vowel of the second syllable is almost always *i*. Normally, the vowel of the final syllabogram would not be sounded or used as an integral part of the word that is being spelled. However, certain exceptions to this strategy have already been noted. When writing some words with certain word-final consonants in specific phonetic contexts, the vowels in the final syllabograms were indeed meant to be pronounced, that is, meant to be an integral part of the word being written. This usually occurs when words end in the

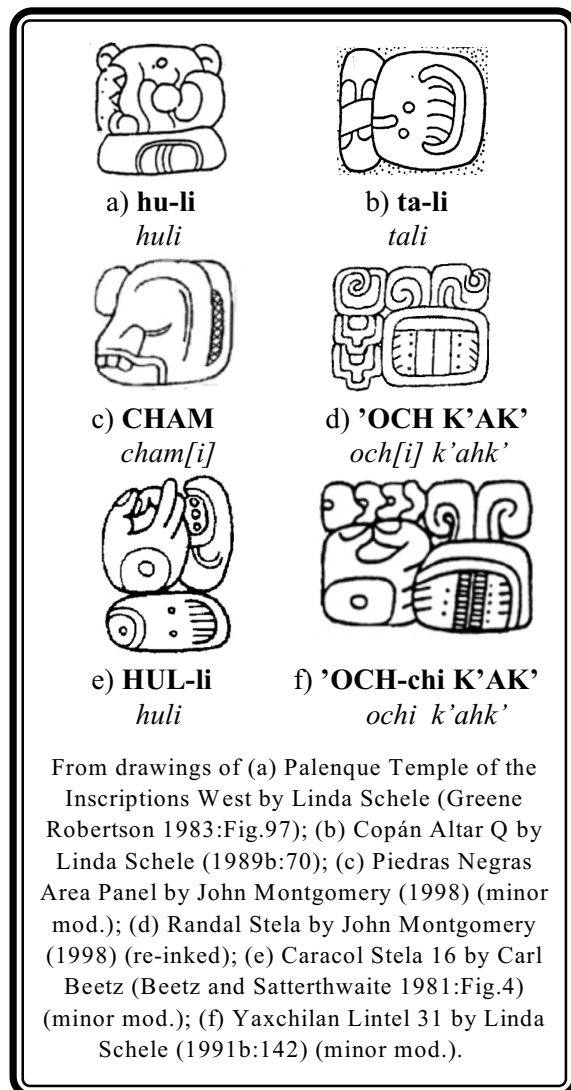


Figure 106. Root intransitives written with syllabograms and logograms

consonants such as /l/, /m/, and /n/, and especially when phonetic characteristics might make pronouncing what would otherwise be the two adjacent consonants difficult. Examples included final /n/ followed by an initial /w/ such as **'i-tz'i-winik** *itzi winik* instead of **itzin winik*.

The circumstances concerning the spelling of CVC intransitives is different because issues of elision or underspelling do not come directly into play. Instead, the use of two syllabograms to write an intransitive verb root with a 3rd person singular subject always results in an extra vowel, given the shape of CV syllabograms. This is also true of so-called vowel syllables since, in those cases, the glottal stop is used as the final consonant in the CVC root. Following the usual reading strategy would result in a form with a final CVC shape. The question to be answered, then, is whether the **i** of the final **Ci** syllabogram is to be used in the transcription and pronunciation of these verbs. The evidence from syllabic spellings offers evidence for two different views of the final **i**. Some, who argue that the *i* is indeed to be pronounced and transcribed, note that it is always present in syllabic spellings. They also note that reconstructions of an *-ik* status marker for Proto-Mayan root intransitives anticipates an *-i* status marker in Ch'olan. Some, who argue against using it as a status marker note that one of the strategies of the writing system is to drop the vowel in the final syllabogram of syllabic spellings.

The examples in Figure 106c-d would also seem to produce a CVC transcription, without a final *-i*, that is, *cham* rather than *chami* “he/she dies/died, *och k'ahk'* rather than *ochi k'ahk'* “fire enters/entered” if one follows the usual reading strategies. Normally, logograms represent a word root and not a lexeme or word with all its affixes. A few have argued against this view, suggesting that instead of just a possibility, accepting logograms as encapsulating a root with its affixes should be recognized as a general rule. If this were really the correct approach, it would likely open up almost every logogram to multiple values or to any range of possible values at any time. This would not only make interpretation difficult for a modern epigrapher, but would raise questions concerning how even Classic Maya readers could accurately derive the message intended by the

scribe or commissioner. Instead, if indeed these logograms are to be transcribed with the root intransitive status marker, they are indeed exceptions to the rule and should not be enshrined as a universal strategy. In Section 2.2.8.1, I have already noted that logograms can write words that consist of roots combined with their affixes when they form new entities. One well-known example is *pak-al* “shield” etymologically derived from a root meaning “doubled up” combined with the adjectival suffix *-al*. Since this was descriptive of the Classic-Period doubled-up cotton protective device, it became a term referring specifically to such a cotton shield.

The situation with the root intransitives is quite different from the **PAKAL** example. The examples in Figure 106e-f consist of logograms providing the word root but are also followed by a syllabogram of the shape **Ci**. These syllabograms are simply designated by some as phonetic complements, providing a clue as to the value of the last consonant of the root. Others have proposed that the **i** of the second syllable provides information concerning the length of the root vowel (cf. Houston et al. 1998:279), although it is doubtful that they still suggest this.

If one espouses both the theory that the vowel of the syllabogram provides a clue to vowel length or character in this case and that it also represents a root intransitive status marker, then it would have to be providing two different pieces of information. However, it is quite unlikely that it would be providing information about vowel length and also providing the *i* thematic suffix of intransitives since the two purposes could unavoidably contradict each other at times, at least within the boundaries of the disharmony theory as presented in Houston et al. (1998). In short, the disharmony theory would “predict” a short root vowel whenever the vowel of the second syllable, or the vowel in a presumed phonetic complement, matched the root vowel. The vowel in the second syllable or the vowel in the supposed phonetic complement in the case of root intransitives is always, or almost always, **i**. Therefore it would either predict a short vowel for all verbs with /i/ root vowels or the theory would not hold for all verbs with an /i/ root vowel. Neither of these is an acceptable situation. Therefore, the **i** in the second

syllabogram and in supposed phonetic complements in such cases must be indicating something else. If this is so, data from intransitive verbs also cannot be used to argue for the disharmony theory.

Before moving on to other arguments concerning the presence or absence of an **-i** status marker on root intransitives in Classic Ch'olan, a second look at the attested examples in Figure 106a and e is in order. The verb *huli* as a freestanding verb is rarely, if ever, written syllabically or logographically without a final **li**. The one example from Naranjo Stela 29 sometimes presented as such is in a very weathered area of the monument. Both the previous glyph block and the **HUL** hand are only partially drawn by Graham (1978:278). What is more, if there is indeed no **li** present, the glyph block may be combining with the previous one to form the compound *yithul* referring to the following named person as a “fellow arriver.” It should also be noted that the previous occurrence of this verb a few rows above it on the same monument is indeed written as **HUL-li**. In other words, the practically universal occurrence of it with **li**, whether the root is written syllabically or logographically, seems to indicate that what is being written is indeed *huli* and not simply *hul*. Besides compound nouns and verbs formed from verb roots, the intransitive verb root that may occur most frequently written logographically using T736 without a following Ci syllable is *cham*, an example of which is shown Figure 106c. Nevertheless, it too occurs frequently with a following **mi** syllable.

3.3.1.2 Intransitive Roots without Markers

Besides the basic problem of allowing a logogram to incorporate a status marker, a thematic suffix, or an inflectional suffix, there are also times when such a suffix would not be appropriate. This situation occurs, for example, when CVC intransitive verbs are used to form compounds with nouns, thereby producing a new noun. The first example in Figure 107a is **'OCH-b'i** *ochb'i(h)* “enter-road” which, as we shall see later, is a noun formed from a verb-noun compound with a figurative meaning “to die.” A similar form is shown in Figure 107b, which includes the verb root *och* combined with *k'in* to form the

compound noun *ochk'in* literally “entering-sun” meaning “west.” Since the noun compound is not *ochik'in*, what is written with the logogram has to be transcribed as *och* and not *ochi*. As a result, the value of **ACHI** for the logogram is not appropriate in this context although the value **OCH** is. So from a theoretical viewpoint, requiring each of the logograms that write an intransitive root to also include as part of its value the *-i* root intransitive marker would require that it would not include that same marker when it is not serving as an intransitive verb. When taken out of context, the analyst would have to write two values for every such logogram, one with the root intransitive status marker and one without.

Including the status marker as part of the logogram would also seem to require that logograms used to write other classes of verbs, for example root transitives, be allowed to incorporate the required verbal affixes or at least markers within themselves without requiring the use of other signs to write them. As already mentioned, something similar to this has indeed been suggested as a theoretical approach by David Mora-Marín (2005). However, even if one were able to make a case for this approach during the late Pre-Classic period, it does not seem to reflect the way the Classic-Period scribes viewed the system since they rarely forego writing the required affixes. Indeed, in the case of some verbs such as *huli* in Figure 106a, the *Ci* syllable is practically always present. However, if one agreed that it was important, and perhaps essential, to explicitly write verbal derivational and inflectional affixes, how, then, is one to explain the fairly frequent occurrence of logograms used to write some CVC intransitive verbs without any additional glyphic affixes such as **CHAM** and **OCH** in Figure 106c and d.

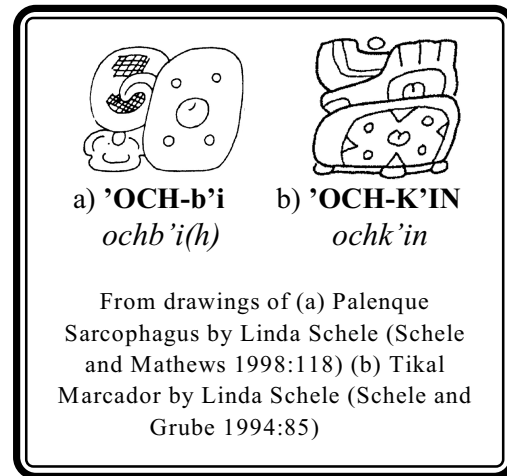


Figure 107. Compounds written with logograms that can also write CVC intransitive root verbs

3.3.1.3 Evaluating Nature of Root Intransitive Marker

The seeming incongruity between the expected root intransitive inflection or status marker and what appears to be attested in the script is a matter of ongoing debate. Currently, many epigraphers seem to have settled on the required presence of the *i* status marker even if it is not explicitly written (see, for example, Hopkins 1997:82; Josserand 1997:115; Houston et al. 2000a:329; and others.). Among other factors, the ubiquitous presence of a **Ci** syllable rather than another CV syllable on root intransitives has led some to conclude that the vowel of the last syllable, **i**, must be employed as verbal inflection. However, before the terms “inflection” and “completive status marker” can be applied to this particular *-i* affix, a review of the evidence for its character, especially in the Ch’olan languages, is crucial.

Using the final *-i* in transcription of syllabically written CVC intransitive verbs, or reconstructing it for those written with bare logograms, also seems to correspond more closely to what has been reconstructed historically for Proto-Ch’olan. Figure

CVC Intransitive Markers/Status Markers

According to Kaufman and Norman (1984:92-93):

Proto-Mayan	plain	** <i>-i(k)</i>
Proto-Ch’olan	incompletive	* <i>el</i>
	completive	* <i>-i</i>

According to Robertson et al. (2004:270):

Common Ch’olan	incompletive	* <i>x</i> -Root- <i>i</i>
	completive	* <i>-i</i>

Figure 108. Reconstruction of Proto-/Common Ch’olan root intransitive status markers

108 summarizes Kaufman and Norman’s and Robertson et al.’s incompletive and completive status markers for root intransitive.

Both of the Ch’olan reconstructions shown in Figure 108 call these forms “incompletive” and “completive status markers.” Incompletive Ch’olan status markers will be reviewed in detail later. They are in principle quite different from the *-i* status marker, especially from a historical point of view, because they are actually recruited from nominalizations. Diachronically, the source turns out to be a gerund. The *-i* suffix,

on the other hand, likely has a long history as a verbal status marker and so deserves separate treatment here. As reconstructed by Kaufman and Norman, Proto-Mayan ***-(k)*, did not exist in opposition to an incomplete form. Instead, it was a status marker for root intransitive verbs. Kaufman and Norman (1984:93) also reconstruct a plain status marker in ***-(i)* for Greater Tzeltalan. However, since neither Tzeltal nor Tzotzil attests an /i/ for root intransitives, the immediate backwards reconstructive evidence for this has to come from the Ch'olan languages.

One of the main principles in reconstruction is that, all else being equal, one should follow the majority in choosing what to reconstruct in a particular case (cf. Campbell 1999:117). So the goal of reconstructing the Proto-Mayan plain status marker calls for seeking a pattern that obtains in as many Mayan languages as possible. The most important aspect of such a narrow search in the daughter languages is not how a particular suffix performs in detail. Instead, the emphasis is on a marker that could have had its origin in a particular historical morpheme. Although the function and meaning of the reflex is important, it is not always critical that it function in precisely the same way. However, if it does not, that leaves more room for doubt as to whether one is actually dealing with a reflex of the same morpheme. It also opens the door to speculation about when any possible changes in use, function, and meaning might have taken place. With that in mind, we will look at the evidence provided in each of the Ch'olan and Tzeltalan Languages.

As already noted, neither Tzeltal nor Tzotzil has an *-i* status marker or thematic suffix for CVC intransitives. As such, they do not provide any evidence in favor of such an affix. Of course, since /i/ is attested in Mayan languages and language families as diverse as Yucatekan, Chuj, Tojolab'al, Jakalteko, Mam, Tektiteko, Colonial Ixil, Awakateko, Tz'utujil, Poqomam, and others as well as /ik/ in K'iche', Western Poqomchi', and Colonial Q'eqchi', there is strong evidence for reconstructing it as Proto-Mayan (see Figure 108). The only question that remains is whether it is possible that it was lost from Greater Tzeltalan before the split into Tzeltalan and Ch'olan.

Acalan Chontal			
<i>uchuci</i>	“she/he/it seized it”	root tv	(Paxbolon et al. 1614:155.22)
<i>ucheli</i>	“she/he/it did it”	der. tv	(Paxbolon et al. 1614:162.7)
<i>uchekteçi</i>	“she/he/it made it visible”	der. tv	(Paxbolon et al. 1614:155.19)
<i>chucci</i>	“she/he/it was seized”	passive	(Paxbolon et al. 1614:161.19)
<i>tali</i>	“she/he/it came, happened”	root iv	(Paxbolon et al. 1614:166.23)
<i>chumuaniob</i>	“they were seated”	posit. iv	(Paxbolon et al. 1614:162.32)
Modern Chontal			
<i>uk’uxi</i>	“she/he/it ate it	root tv	(cf. Keller and Luciano G. 1997:450)
<i>utz’ibi</i>	“she/he/it wrote it”	der. tv	(cf. Keller and Luciano G. 1997:451)
<i>amuksi</i>	“you bathe her/him/it	der. tv	(cf. Pérez González 1998:27)
<i>juli</i>	“she/he/it arrived”	root iv	(cf. Keller and Luciano G. 1997:460)
<i>bixi</i>	“she/he/it went”	irreg. iv	(cf. Keller and Luciano G. 1997:436)
<i>wa’wäni</i>	“she/he/it was standing	posit. iv	(cf. Keller and Luciano G. 1997:466)

Figure 109. Completive inflection in Acalan and Modern Chontal

3.3.1.4 Completive Inflection in Chontal

As Figure 109a illustrates, both Acalan and Modern Chontal employ *-i* as completive inflection not only for root intransitives but also derived intransitives, root and derived transitives, passives, and positionals.¹⁰⁰ This *-i* suffix in Chontal does not function as a root-intransitive status marker at all, but rather as completive inflection on a broad range of transitive and intransitive verb forms. Since that is the case, there is really no direct functional or semantic relationship to the ***-i(k)* status marker at all other than the coincidental shape of the vowel. A decision to equate it with the Proto-Mayan root intransitive status marker would require proof. The relationship to ***-i(k)* cannot simply be assumed based solely upon shape without semantic or functional evidence. What is more, the semantic and functional evidence points instead away from Proto-Mayan ***-i(k)*. Why, if it marks the plain status for root intransitives, should it spread to all verb

¹⁰⁰ In both Acalan and Modern Chontal, the completive suffix *i* is actually not present on most intransitive and positional verbs with 1st and 2nd person subjects or on transitive verbs with 1st and 2nd person objects (cf. Knowles 1984:72-75). It appears only with 3rd person subjects or objects for which the Set B absolutive dependent pronoun is unmarked (null: Ø).

forms including transitives? Why, if it does not mark completive aspect should it develop into a completive aspect marker for all verbs?

I suspect that the situation in Ch'ol, which is quite different from Chontal in this respect, has helped lead to this assessment for Chontal. However, the situation in these two languages is quite different despite their similarity in other respects. In Ch'ol, the *-i* status marker is indeed limited to intransitives, as we shall see later. Also, it is very important to note that, in Ch'ol, the *-i* status marker is not sufficient on its own to inflect intransitive verbs for the completive aspect. Some other adverbial particle or auxiliary is required.

Elsewhere (Wald 2004b:248-251), I have discussed in detail several suffixes that occur in Acalan Chontal of exactly the same shape, *-i*, but with different origins, functions, and meanings.¹⁰¹ One of them is the most likely source for this completive inflectional suffix. It has its origin in the Proto-Mayan enclitic ***-eer* meaning “in the past, ago.” Because this enclitic will be discussed in great detail later, it will only be mentioned here. There are forms of this adverbial enclitic *-ihi* ∞ *i* in all of the Ch'olan languages, but only in Acalan Chontal was it still preserved in Colonial times as an enclitic that attached to both intransitive and transitive verbs. It was also recruited in Chontal as a completive suffix on a wide variety of verb types. As is customary in the evolution from lexical to grammatical usage, it has lost some of its original meaning and connotation. However, it has preserved part of its characteristics. From the enclitic's multiple referential and adverbial past time connotations, it retained the completive aspectual characteristic, that of referring to an event as a whole, as complete.

Adverbs have historically played a large role as the source of inflectional suffixes and auxiliaries in many Mayan languages (cf. Kaufman 1989; Robertson et al. 2004:267). This is especially true of Ch'ol and Chontal as will also be discussed in more detail later. Although the meaning of an affix based upon ***-eer* would not be precisely the same as the original enclitic and not even the same as that enclitic's reflex in Acalan Chontal,

¹⁰¹See also Section 6.4.2 below.

change that includes the loss or narrowing of meaning or “semantic reduction” is actually one of the characteristics of grammaticalized forms as noted by Bybee et al. (1994:6) and others. Both the original enclitic and its grammaticalized form as completive aspect inflection existed side by side in Acalan Chontal, but by the time of modern Chontal, *-ihi* ∞ *-i* no longer occurred as an enclitic on verbs at all. It was retained in narrow non-verbal contexts only. The completive aspect verbal suffix, however, continued on into Modern Chontal.

The general nature of the grammaticalization process will also be addressed in more detail later. The main point to be gathered from this situation in Chontal for the present purposes is that *-i* is indeed a general inflectional suffix marking the incomplete aspect in Chontal, but it is not related to a different suffix of a similar shape, the *-i* that marks root-intransitive verbs.

Ch'orti' (Comparative Ch'orti' data from Pérez Martinez (1994) unless otherwise noted)		
-i thematic or status marker (conflicting data):		
(indicative)	(imperative)	(source)
<i>ajni</i>	<i>ajnen</i>	Run! (Kaufman and Norman 1984:104)
<i>a'jni</i>	<i>ajnye'n</i>	Run! (Pérez Martinez. et al. 1996:7)
<i>a'jni</i>	<i>ajnien</i>	Run! (Lubeck 1989:155,291)
<i>uk'i</i>	<i>uk'en</i>	Cry! (Kaufman and Norman 1984:104)
<i>o'yk'i (uk'i)</i>	<i>uk'ye'n</i>	Cry! (Pérez Martinez et al. 1996:239)
(only partial data available):		
<i>ati</i>	<i>aten</i>	Bathe! (Kaufman and Norman 1984:104; Lubeck 1989:153)
<i>ati</i>	[*atye'n]?	Bathe! (Imperative data not available in the other sources consulted here)
-i thematic		
<i>jiri</i>	<i>jirye'n</i>	Rest!
<i>jiri</i>	<i>jirien</i>	Rest! (Lubeck 1989:153)
<i>k'axi</i>	<i>k'axe'n</i>	Fall!
<i>nuxi</i>	<i>nuxe'n</i>	Swim!
<i>ojri</i>	<i>ojre'n</i>	Fall!
-a thematic		
<i>a'jkna</i>	<i>ajkne'n</i>	Whine!, Groan!
<i>xana</i>	<i>xane'n</i>	Walk!
<i>patna</i>	<i>patne'n</i>	Work!
<i>akta</i>	<i>akte'n</i>	Dance!
<i>a'ra</i>	<i>ar'en</i>	Lay (eggs)! (intransitive)
-e thematic		
<i>tze'ne</i>	<i>tze'nye'n</i>	Smile!, Laugh!
-V_Ly "status marker" (Kaufman and Norman 1984:104)		
"thematic suffix" (Wichmann 1999:38-39)		
<i>k'otoy</i>	<i>k'oten</i>	Arrive!, come! (also a farewell greeting)
<i>ochoy</i>	<i>ochen</i>	Enter! (Perez Martinez et al. 1996:156)
Non-CVC transitive verb		
<i>uya're</i>	<i>aren</i>	Say! (it), Tell (it)! (transitive)
-i thematic effect on 1st sg. absolutive (Set B) pronoun		
<i>tar</i>	<i>ne'n tarie'n</i>	I came (Wisdom 1950:664)
<i>tar</i>	<i>tarye'n</i>	I came (Hull 2005:37)

Figure 110. Thematic suffixes in Ch'orti' and their effect on imperative forms

3.3.1.5 Root Intransitive Status Markers and Thematic Suffixes in Ch'orti'

Almost all of the evidence available from Ch'orti' points toward a system of thematic suffixes rather than status markers for root intransitive verbs. Figure 110

includes examples of verbs taking thematic suffixes in *-i*, *-a*, *-e*, and *-V_Ly*. According to Wichmann (1999:23), “transitivity and derivational status” play a different role in regard to those thematic suffixes. “The former [“transitivity and derivational status”] determines thematic suffixes, the latter [“root structure” and “CVC or non-CVC (including VC)”] has consequences for the shape of passives and imperatives.” The presence of a specific thematic suffix on a particular stem can influence the shape of a certain imperative suffix resulting in either *-en* or *-e’n*. Examples of these suffixes with various thematic suffixes is also shown in Figure 110.

Although not obviously relevant to the character of root intransitive verbs in Ch’orti’, it is nevertheless important to note that the Set B, 1st and 2nd person absolutive pronouns are affected by the thematic suffixes in much the same way as are the imperative suffixes in *-en*. So, the pronouns *-en* “I,” *-et* “you;”, *-on* “we,” and *-ox* “y’all” become *-e’n*, *-e’t*, *-o’n*, and *-o’x* when the intransitive stem ends in one of the thematic suffixes *-i*, *-a*, *-e*. Taking a look back at Figure 110, one can see that the pattern is the same as that for the imperative that is formed in *-en*. When the intransitive stem ends in a vowel, the imperative suffix becomes *-e’n* or *-y-e’n*. Because this suffix is identical in shape to the 1st person singular Set B dependent pronoun and undergoes precisely the same change following the same verbal forms, it is highly unlikely that one is dealing with a morphological difference here, but rather with a morphophonological event (cf. Wichmann 1999:23).

Kaufman and Norman (1984) offer an alternative view of the reason for the differences in the forms of the imperative. Figure 110 includes some of the examples that they provide. Only if their transcription differs from that provided by Pérez Martinez (1994) or Pérez Martinez et al. (1996) are they listed separately and noted as such. Otherwise, they either provide the same transcription or the transcription follows the rules that they suggest for the formation of the imperative forms.

Although Kaufman and Norman (1984:103-104) do recognize the presence of thematic suffixes on intransitive verbs, they do so only in the case of derived

intransitives. They discern two different types or classes of root intransitive verbs, those that take a $-V_{ly}$ “completive (indicative) marker formed by reduplicating the root vowel” and “those that take $-i$ as the completive status marker.”¹⁰² Looking again at Figure 110, they agree with Perez et al. and others, that when forming the imperative of intransitive verbs in $-V_{ly}$, that suffix is dropped and replaced by $-en$. They also agree that when the intransitive verb takes a thematic suffix, that suffix is not simply dropped but is either retained, or more likely, is elided but directly affects the shape of the imperative inflectional marker resulting in $-e'n$ as can be seen in several examples in Figure 110. Although not mentioned by Kaufman and Norman, several examples also show that the effect can be even more noticeable, resulting in both replacing the $/i/$ with a $/y/$ and also inserting a glottal stop between the $/e/$ and the $/n/$ of the imperative suffix.

However, it is at this point that Kaufman and Norman (1984:104) seem to part company with most of the other interpreters. For them, “If the verb is a root intransitive, then the final vowel of the inflectional stem represents the completive (indicative) suffix; if the verb is a derived intransitive, the final vowel of the stem is assigned to the thematic suffix.” In other words, they suggest that it is the morphological character of status markers as opposed to thematic suffix that causes the variation here between $-en$ and $-e'n$ and not the presence of two vowels following immediately upon each other. For them, then, the impetus is not only morphophonological. That is, it is morphophonological in the case of derived intransitives, but for root intransitives, they see no morphophonological effect. In the case of both $-V_{ly}$ and $-i$, they predict that the status marker would simply be dropped and replaced by the $-en$ suffix without any phonological effect upon the imperative morpheme. The thematic suffix of derived transitives, whether it be $-i$, $-e$, or $-a$, is retained morphologically and so affects the imperative suffix

¹⁰²It should be noted here that Kaufman and Norman alternate between calling these suffixes “completive status markers” and “indicative status markers” depending upon whether the reference is to Ch’olti’ (“completive”) or Ch’orti’ (“indicative”).

phonologically producing either *-Ven* or *-e'n*. That view is in direct opposition to Wichmann's (1999:23) analysis.

It is even more surprising that Kaufman and Norman's data is also in direct opposition to that of Wisdom (1950), Pérez Martinez (1994), Pérez Martinez et al. (1996), and Hull (2005). For example, where Kaufman and Norman attest *ajnen* and *uk'en*, Pérez Martinez et al. attest *ajnye'n* and *uk'ye'n* as shown in Figure 110. How is it possible for the data to diverge to this degree? One possibility might be that they are getting their data from areas in which different dialects are spoken. I do not have access to two of the sources quoted by Kaufman and Norman, that of Larsen's unpublished "Chorti elicitation notes" and Kaufman's unpublished "Chorti Field Notes (Jocotan)" so I was not able to see if those were the sources for this analysis. They also reference Fought (1969; 1972), but I have not been able to locate in his data specific attestations of imperatives for root intransitives in *-i*. Fought (1969:233) does list a root intransitive in *-a*, *xan-a*, and he provides the imperative form *xane'en* (*xane'n*) for it. Unfortunately, Kaufman and Norman do not address root intransitives in *-a* in this regard, and so this data cannot be compared.

There is another source, too late for use by Kaufman and Norman, that of Lubeck (1989) whose data was gathered in the village of Guareruche within the municipality of Jocotán. It does seem to agree partially with that provided by Kaufman and Norman. For example, Lubeck lists the imperative of *a'ti* as *aten*. But Lubeck also lacks a glottal stop in the Set B dependent pronoun when used with this same verb as, for example, in *atien*. Lubeck's data also differs insofar as even the imperatives of derived intransitives with status markers do not include a glottal stop in the suffix. Lubeck (1989:152-157, 290-293) does not attest the appearance of *-e'n* for the imperative of any intransitive verbs whether root or derived, CVC or non-CVC.¹⁰³ Yet Kaufman and Norman attest an imperative in *-e'n* for all those derived verbs. More research would be needed to

¹⁰³Lubeck (1989:12-13) also does not attest the phonological presence of a glottal stop for the Set B pronouns in 1st and 2nd persons for any verbs in these contexts, for example, 1st sg. *-en*, 2nd sg. *-et*.

ascertain whether one is dealing here with a dialectal difference or whether Lubeck simply does not record the glottal stop in such cases. The same also holds true for the data followed or supplied by Kaufman and Norman that is included in Figure 110.

For the purposes of the present investigation, that of determining whether Ch'orti' provides evidence of a root-intransitive status marker in *-i*, there are only a few options open. One is to conclude that there is at least one dialect of Ch'orti' which has indeed preserved a root-intransitive marker in *-i*. However, at this point there seem to be too few supporting examples, too much counter-evidence, and a lack of a convincing synchronic argument, internal to Ch'orti', as to why this particular suffix should be treated differently in just a few cases. First of all, of the three examples Kaufman and Norman bring of what they conclude are root verbs with *-i* status markers, only one form, *aten*, is supported in data from another source. However, that same source, Lubeck (1989:291) provides counter-evidence against a second of the three examples by listing *ajnien* as the imperative form. But, as Kaufman and Norman argue, the /i/ should not be present if it were indeed a status marker and would be there if it were a thematic suffix.

The imperative of *uk'i*, the third example from Kaufman and Norman, is not attested in Lubeck but is presented by Pérez Martinez et al. as *uk'ye'n* instead of *uk'en*. Besides these examples expressly addressed by Kaufman and Norman, there are others in Proto-Ch'olan or Classic Ch'olan that appear to be root intransitives in *-i*. One of these is *jili* (*hili*). Again, despite its status, Lubeck provides the imperative form *jirien* and Pérez Martinez et al. *jirye'n*.

In sum, it seems that analyzing all of the suffixes on root and derived intransitive verbs in Ch'orti' as thematic suffixes provides the clearest and most logical approach to both their behavior and their forms in the Ch'orti' verbal system. At least in the most studied dialects of Ch'orti', there seems to be no evidence of verb stems that represent a root intransitive status marker which is a reflex of the one present in Proto-Mayan. Even less likely is the presence of any form of “completive” status marker in *-i*.

One could possibly argue that *-V_iy* is an intransitive status marker in Ch'orti'. That suffix will be looked at in more detail later. It does indeed seem to fit the criteria that were set down by Kaufman and Norman for identifying root intransitive status markers in Ch'orti'. Such an analysis is acceptable as long as one does not interpret it as a “completive” status marker, because there is indeed no evidence of that in Ch'orti'. The suffix is the same whether it appears in the incompletive or completive just as is the case for transitive verbs.

If indeed there is a word or two in some dialects of Ch'orti' that still preserve a root transitive status marker in *-i*, their distinction as such has disappeared from the most attested versions of Ch'orti'. If any reflexes of the Proto-Mayan root intransitive status marker in *-i* remain in any dialects, they seem to have vanished at least in the most recent data provided by native Ch'orti' speakers themselves, as for example, in the work of Pérez Martinez (1994) and Pérez Martinez et al. (1996). A related question that might be asked, considering the close relationship between Ch'orti' and the language of the Classic-Period texts, is “To what extent are thematic suffixes present in Classic Ch'olan? The answer to that question will be discussed after examining the characteristics of root intransitives in Ch'olti'.

3.3.1.6 Root Intransitive Status Markers and Thematic Suffixes in Ch'olti'

In order to gain perspective concerning the possible presence of an *-i* root intransitive marker in Ch'orti', the best approach might be to review several of the relatively common occurrences of *-i* suffixes on verbs of various categories. At any rate, it may be the best way to gain an insight into the relative productivity of that suffix on root intransitives. Similar to Ch'orti', the *-i* suffix is not at all limited to root intransitives in Ch'olti'. In fact, the most widely attested occurrence of a suffix of that shape in Ch'olti' is on root transitives. Figure 111 includes just some of the transitives that take an *-i* suffix. They include both CVC and 'VC (VC) transitive stems. Most important to note is that, contrary to Classic Ch'olan, this suffix is not limited to root transitive verbs

Ch'olti' Root Transitives with <i>-i</i> suffixes			
Original Ch'olti'	Spanish Meaning	ALMG Orthography	English Meaning
<i>chuqui</i>	espiar	<i>ch'uki</i>	watch, spy on
<i>hoqui</i>	hosar	<i>jok'i</i>	to root, root up, uproot
<i>taqui</i>	mandar	<i>taki</i>	to send
<i>yuqui</i>	mezclar	<i>yuk'i</i>	mix
<i>chuqui</i>	mirar a escondidas	<i>ch'uki</i>	spy; watch from hiding
<i>lachi</i>	arañar, rasguñar	<i>lachi</i>	scratch/arañar
<i>yoli</i>	cazar fieras	<i>yoli/yohli</i>	hunt deer
<i>ubi</i>	oir	<i>ubi</i>	hear
<i>cati</i>	pregunta	<i>k'at, k'ati</i>	ask, ask for
<i>taqui</i>	saludar	<i>tak'i</i>	greet
<i>yuli</i>	untar	<i>yuli</i>	to daub, smear, anoint
<i>hiqui</i>	apartar	<i>jik'i</i>	separate, divide up, put aside
<i>chuchi</i>	burlar	<i>ch'uch'i</i>	mock, make fun of
<i>aci</i>	enturbiar	<i>ak'i</i>	muddle, make muddy or cloudy
<i>xoi</i>	hacer procesion	<i>xoyi [joyi]</i>	parade something around, make a ceremonial circuit
<i>utzi</i>	oscular, oler	<i>utz'i</i>	kiss, smell

Adapted from Stross' (1990) edited version of Morán's (1935c) "Vocabulario"

Figure 111. Ch'olti' root transitives with *-i* thematic suffixes

with an /i/ root vowel. This means that the move away from root transitive status markers in *-V_Iw* to thematic suffixes in *-i*, among other vowels, had already begun in Eastern Ch'olan by Colonial times (17th Century - Approx. 1625 - 1695). Although in Ch'olti' many CVC transitive verbs were still taking the harmonic vowel suffixes that descended from the *-V_Iw* CVC transitive markers of the Classic period, there was nevertheless a great increase in the number of root transitives that took instead an /i/ suffix regardless of the root vowel. This is an indication, especially in light of the Classic Ch'olan use of *-i* as a status marker for root intransitive verbs, that *-i* was probably no longer considered a root intransitive marker. Up until then, the root transitive verbs were still distinguished by taking an /i/ only if the /i/ matched the root vowel. Also, the loss of the final /w/ in Ch'olti' would have made the distinction even harder. Although less advanced than in

the modern Ch'orti' verb system, the suffixes on transitive roots were in the process of being reanalyzed as thematic suffixes. This had progressed even further by the time Ch'orti' was recorded, as we have already seen. What is even more important here, this reanalysis was not limited to transitive verbs but had advanced even further in the case of root intransitive verbs.

Ch'olti' Root Intransitives			
Original Ch'olti'	ALMG Orthography	English Meaning	Source
Intransitives in -i			
Possible Residual Status Markers			
a) <i>talel</i>	<i>talel</i>	come	(Morán 1935c:64)
<i>tali</i>	<i>tali</i>	come	(Morán 1935b:1,4-5, passim)
b) <i>vixnel</i>	<i>b'ixnel</i>	go	(Morán 1935c:37)
<i>vixi</i>	<i>b'ixi</i>	go	(Morán 1935a:20-21; 1935b:4, passim)
Uncertain or Both Attested			
c) <i>vquel</i>	<i>uk'el</i>	cry	(Morán 1935c:41)
(Not certain but Ch'orti' has thematic -i and not -V _{IY} , so it is not likely in Ch'olti' either. Evidence indicates it is not thematic because <i>uquel</i> has no -i)			
d) <i>numiel</i>	<i>numiel</i>		
1. <i>numel</i> (or <i>numel</i>)		pass, pass by	(Morán 1935c:51)
Thematic -i.			
e) <i>hiliel</i>	<i>jiliel</i>	rest	(Morán 1695:106 (miscopied into 1935))
f) <i>tihpiel</i>	<i>tijp'iel</i>	jump	(Morán 1935c:62)
g) <i>caxiel</i>	<i>k'axiel</i>	fall	(Morán 1935c:14)
h) <i>luhbiel</i>	<i>lujb'iel</i>	tire (tiredness)	(Morán 1935c:19)
-V_{IY} Intransitive (for comparison purposes)			
i) <i>chamai</i>	<i>chamay</i>	die	(Morán 1935b:13)
j) <i>vanel</i>	<i>wanay</i>	sleep, dream	(Morán 1935c:62)
<i>vanai</i>	<i>wanay</i>	sleep, dream	(Morán 1935a:21)
k) <i>ochel</i>		enter	(Morán 1935c:26)
<i>ochoi</i>	<i>ochoy</i>	enter	(Morán 1935b:13)
Derivational -i (for comparison purposes)			
l) <i>butzi</i>	<i>b'utz'i</i>	smoke	(Morán 1935c:4)
m) <i>utiel</i>	<i>utiel</i>	bear fruit, fructify' (cf. fruta; cara; ojos)	(Morán 1935c:31)
n) <i>tein</i>	<i>te'in</i>	use a wooden stick, pole [Usitative]	(Morán 1935c:67)

Figure 112. Some affixes occurring on root intransitive verbs in Ch'olti'

Both Kaufman and Norman (1984:104) and Sattler (2004:368) locate only two “root intransitive verbs” with *-i* as the “completive aspect marker,” *tali* and *b'ixi*. However, classifying *b'ix* as a root intransitive may be questionable (as Sattler notes), since in Ch'olti' *b'ix* formed the incompletive by adding an *-i* preceding the incompletive, gerund-based *-el* suffix. An *-n*, from *-an*, is normally used to form an incompletive of derived transitives in the Ch'olan languages. However, in the case of derived transitives, it is not usually followed by an *-el* suffix and it is not normally present at all on root intransitives. Also, *b'ix* is quite irregular in all of the Ch'olan languages in which it occurs. Kaufman and Norman (1984:117) also hint at its unusual nature noting that it is “probably based upon **b'ih* ‘road’” and has “no direct outside cognates.” At any rate, it is an extremely irregular verb and so not a good one to use for discovering regular patterns or upon which to base general rules.

Since *b'ixi* is not a good candidate to use for exemplifying the affixial patterns of root intransitives, that leaves only the root *tal* to draw upon. It is the only clear example from Ch'olti' since it forms the incompletive in *-el* without the *-i* and is attested as ending in *-i* as well, as shown in Figure 112a, *talel* and *tali*. But this could only be of any immediate importance from a historical point of view. It is of almost no importance synchronically if one wishes to discover how the verb system worked in Ch'olti'.

We have also already seen that, in Ch'orti', even the reflex of *tul* forms the imperative with a thematic *-i-* as in *talien* and so it explicitly fails to reflect even an unproductive *-i* status marker. Finally, *tul* is one of the verb roots that is irregular in Modern Chontal and in some of the Ch'ol dialects. This may be due to its frequent use which itself often leads to irregularity in verb forms. Such verbs usually cannot be accepted as indicative of common patterns and so, from a synchronic standpoint, *tali* would hardly be recognized as such either.

A useful analysis of Ch'olti' root intransitives comes from only two patterns. The most common pattern mainly involves verbs of motion or change of state and takes the form $-V_{i,y}$ with the vowel of the suffix repeating the vowel of the root. When forming a

gerund, which is also used for the incomplete, this status marker or thematic suffix (etymologically related to a Classic Ch'olan mediopassive suffix) is deleted and *-el* is suffixed directly to the root. These forms will be discussed in much more detail below in 3.3.2.

The other pattern involves what has already been called a thematic suffix in the discussion of Ch'orti' intransitives. As in Ch'orti', /i/ is not the only thematic suffix for root intransitives, but it is the only one that is directly relevant to our discussion here. Although Kaufman and Norman seem to limit intransitive thematic suffixes to derived intransitives for both Ch'orti' and Ch'olti', the textual evidence points to examples of root intransitives as well. Kaufman and Norman might dispute the analysis of *k'ax* as a root intransitive. However, they do include *hil* as a root intransitive in their Proto-Ch'olan word list (Kaufman and Norman 1984:120). Despite this classification, Morán includes the *-i* in *hiliel* (*jiliel*), as can be seen in Figure 24e. According to their analysis, one would have expected the second *-i* in *hiliel* to be absent if indeed it represents a “completive status marker” and not a thematic suffix.

Instead, following Kaufman and Norman's approach, it must be thematic because the /i/ is retained when forming the gerund used for the incomplete. It is, then, not serving as a status marker for root intransitives and so is not the equivalent of the Classic Ch'olan root intransitive status marker. Instead, along with and similar to Ch'orti', Ch'olti' has innovated a completely different way of analyzing these suffixes in its verbal system. In this I agree with Kaufman and Norman (1984:105) who state that

With regard to the antiquity of thematic suffixes, we can be certain that they were not present in proto-Greater Tzeltalan but were well established in proto-Eastern Cholan. . . . We know of no direct evidence for the presence of thematic suffixes in proto-Cholan.

These thematic suffixes for intransitive and transitive verbs are an innovation in Eastern Ch'olan. There is no evidence for these thematic suffixes in either Ch'ol or Chontal. There is also no evidence for thematic suffixes of this sort in Classic Ch'olan. Of course, Kaufman and Norman intentionally avoided taking the Classic texts into consideration at the time. However, it is now clear that the intransitive and transitive thematic suffixes just discussed represent a development that took place after the texts of the Classic Period were written and likely even after the split into Western and Eastern Ch'olan. They are, in fact, one of the main characteristics that distinguishes the two Ch'olan branches from each other. That they are a characteristic not shared by the Classic Ch'olan verbal system is also significant.

Before moving on to discuss the Ch'ol root intransitives, two other points should be mentioned concerning Figure 112. The examples shown in Figure 112, l-n are, of course, not directly relevant to this topic since the /i/ in them is clearly a derivational suffix. The *-i* in *b'utz'i* and *utiel* derives intransitive verbs from nouns. The *-in* in *te'in*, which also occurs at times as simply *-i* in the Ch'olti' document, is likely a usitative derivational suffix.

More interesting is *uk'el* in Figure 112c. It may be that *uk'el* took a *-V_{ly}* suffix in Ch'olti', which would be compatible with the *uk'el* gerund/incompletive form. However, Kaufman and Norman use this verb as an example of a root intransitive in *-i*, that is, which takes an *-i* status marker, in their discussion of Ch'orti'. As also seen in Figure 110, the other sources including Pérez Martínez et al. (1996) list the Ch'orti' imperative of this verb as *uk'ye'n*, which points to a thematic *-i* suffix instead. Therefore, it may indeed be that in Ch'olti', *uk'*, like *tul*, was one of the few verbs that still behaved like the root intransitive verbs in Classic Ch'olan. The only other option seems to be that it took a *-V_{ly}* suffix in Ch'olti' but an *-i* thematic suffix in Ch'orti'. So far I have not been able to locate it in Ch'olti' except in gerund form.

Most interesting are the two forms *numiel* and *numel* in Figure 112d. Morán separates *numiel* and *numel* in the Vocabulario with the abbreviation “l.” This is an

abbreviation used in most of the Colonial dictionaries and stands for the Latin word *licit*, literally “it is allowed” (Simpson 1960:345). This abbreviation is used to present an alternative form or variant of the same word. If this information is correct, there seems to have been in the language and its possible dialects a struggle between whether to use the thematic *-i* suffix or the *-V_iy* suffix with some verbs. At least in Ch’orti’, the latter, *numuy*, won out. Given only the data from Ch’olti’, it is also possible that the difference was between the traditional *-i* status marker, as still possibly evidenced by Ch’olti’ *tali*, and the *-i* thematic suffix as evidenced by Ch’orti’ *tarien*.

At this point, the four Colonial and Modern Ch’olan languages already examined provide very little evidence for a root intransitive status marker in *-i*. What little evidence there is in Acalan Chontal, Chontal, Ch’olti’ and Ch’orti’ would likely only be noticed as part of a search for something already expected based upon historical or comparative information or in the context of an explicit search for a specific paradigm. At best, the evidence from these languages provides only extremely rare fossilized examples that would otherwise require verification from elsewhere to be included in a reconstructed verbal system as anything beyond exceptions. However, besides Classic Ch’olan, one more language remains to be examined for evidence of root intransitive status markers, and that is Ch’ol.

Ch'ol Root Intransitive Verbs		
	Meaning when used with <i>tza'/tzi'</i> or <i>ta'/ti'/ti</i> auxiliary*	
<i>letzi</i>	went up	(Aulie and Aulie 1999:252)
<i>ochi</i>	entered	(Aulie and Aulie 1999:253)
<i>juli</i>	came, arrived	(Hopkins and Josserand 1988f:j8)
<i>jili</i>	stopped, finished	(Schumann 1973:82)
<i>ñumi</i>	passed	(Schumann 1973:90)
<i>uk'i</i>	cried	(Schumann 1973:98)
<i>tali, tili</i>	came	(Attinasi 1973:322) [Differs by dialect]
<i>putz'i'</i>	huir, huirse	(Schumann 1973:92)
<i>p'ixi</i>	despertar	(Schumann 1973:92)
Ch'ol Quasi Root Intransitives		
(Reinterpreted Passive Stems – the first two also attested as such in Classic Ch'olan)		
	Meaning when used with <i>tza'/tzi'</i> or <i>ta'/ti'/ti</i> auxiliary*	
<i>ujti</i>	happened	(Schumann 1973:98)
<i>yajli</i>	fell	(Josserand and Hopkins 1988a:1)
<i>sujti</i>	return, turn into	(Schumann 1973:94)
<i>sajti</i>	die, finish (morir , acabar)	(Schumann 1973:93)
<i>tijp'i</i>	jump (brincar)	(Schumann 1973:95)
*The auxiliary set is dialectally determined with the former used in Tumbalá and Sabanilla and the		

Figure 113. Ch'ol root intransitive status marker *-i*

3.3.1.7 Root Intransitive Status Markers versus Completive Aspect Suffixes in Ch'ol

It is Ch'ol that best reflects the Classic Ch'olan status markers for both root transitive and root intransitive verbs. A few examples illustrating this similarity for root intransitives can be seen in Figure 113. We have already seen that both Ch'ol and Ch'olti' preserve the $-V_1$ portion of the suffix for CVC transitives. But, except perhaps for *tali*, the *-i* status marker is not attested on intransitive verbs in Ch'olti' and an *-i* suffix is more common for transitives than intransitives in both Ch'olti' and Ch'orti'. Ch'ol, on

the other hand, carries an *-i* suffix on almost all root intransitive verbs used in constructing verb complexes in the completive aspect.

Tumbalá Ch'ol: Completive Aspect		
a)	<i>tza' ochiyon</i>	I entered (Aulie and Aulie 1999:253)
	<i>tza' ochi</i>	he entered (Aulie and Aulie 1999:253)
b)	<i>Tsa' bech yajli jini ch'ejew.</i>	(Aulie and Aulie 1999:241)
	The tumor went away.	
c)	<i>Wi'ilix tsa' tili jini k'in mi'yäl.</i>	
	Later the sun came, this boy.	(Whittaker and Warkentin 1965:13)
Tila Ch'ol: Completive Aspect		
d)	<i>ti majliyon</i>	I went (Warkentin and Scott 1980:72)
	<i>ti majli</i>	he went (Warkentin and Scott 1980:72)
e)	<i>Ti' bech yajli jini aläsil</i>	(Warkentin and Scott 1980:97)
	That toy fell to the side.	
f)	<i>Ti ujti ti tijp'el.</i>	(Warkentin and Scott 1980:74)
	He stopped jumping.	

Figure 114. Use of the root intransitive status marker in Ch'ol

Despite the superficial similarity of this strategy to that of Chontal, there are two critically important differences. First, Chontal, both Colonial and Modern, employs an *-i* suffix for almost all verbs in the completive aspect, whether root or derived transitive, root or derived intransitive, or positional. It does not indicate intransitivity at all, but rather serves as a completive aspect marker or inflectional suffix for almost all verbs. Second, and very important in this context, the *-i* suffix on verbs in Chontal is sufficient by itself to indicate completive aspect. That is not the case for Ch'ol. Figure 114 contains some examples of phrases and sentences showing how the past or preterite is formed using the root intransitive status marker in Ch'ol.

There are several critical differences between what is shown in Figure 114 for Ch'ol and a superficially similar paradigm for Chontal. First, Ch'ol uses additional particles or auxiliaries based upon adverbs or verbs to form various tenses and aspects. This holds for both the incomplete and completive aspects. In the case of neither the incomplete nor the completive of root intransitives does the verb plus the so-called

“aspectual suffix” of *-el* or *-i* stand alone to indicate incomplete or complete, respectively, as it does in Chontal. Second, *-i* functions in this way on most CVC intransitive and many non-CVC intransitive verbs but not on transitive verbs.

An intransitive verb with this *-i* suffix and an absolutive pronoun cannot be used alone to express a completed action or event without the appropriate aspectual particle or auxiliary. For example, one cannot simply drop the particle *tza'* in *tza' yajli* “he fell” and retain the meaning of the sentence. It is also true that these same particles can be used with transitive verbs. But unless their root vowels are themselves /i/'s, their stems do not end in *-i* but rather in *-V_I*. Nevertheless, they still retain the same aspectual meaning – as in *tza' taja* “you met him” (cf. examples in Aulie and Aulie 1998:235,243).¹⁰⁴ An important conclusion one can draw from the regularity of their behavior, is that the *-V_I* and *-i* suffixes likely indicate something different from, or at least in addition to, what would otherwise just be complete aspect. What the evidence indicates is that *-V_I* marks the verbs as root transitives and that *-i* marks the verbs as root intransitives.

The *-i* status marker has also come to be used, by analogy, in limited cases of derived intransitives, such as passives in CVhC. As already noted, this analogous use of the suffix *-i* had already begun in Classic Ch'olan as attested with a few cases of *-h-* infix passives reinterpreted as root intransitives such as *uhti* and *yahli*. The identical Ch'ol versions of these two examples are also shown in Figure 114b, e, and f. Regardless of the function *-i* performs by default in distinction from the *-el* in incomplete contexts, its status as an intransitive status marker remains intact.

So, Ch'ol is the Ch'olan language that best preserves the status markers attested in the Classic texts for CVC transitives as well as for CVC intransitives and some CVhC intransitives. Beyond that, it provides evidence that the status marker for CVC and some CVhC intransitives was *-i* and not null (*-Ø*) as one might otherwise conclude from the

¹⁰⁴Note that it may appear that different particles (grammaticalized verbs and adverbs) are sometimes used with the same meaning, for example, one might encounter *tzac*, *tza'*, and *tzi'* used for the complete of transitive verbs. The differences are, however, simply due to the attachment of dependent pronouns accompanied by minor changes to the stem of the particle or auxiliary.

way they are often written glyphically. This evidence from Ch'ol, when viewed along with the reconstructed Proto-Mayan status marker for CVC intransitives in **-i(k)*, makes it even more likely.

Arguments for a null status marker for root intransitives in the Classic Period, however, do have merit based upon several factors. The Tzeltalan languages have a null status marker for CVC intransitive verbs. The *-i* completive suffix in Chontal is not limited to intransitives and may not be related to Proto-Mayan **-i(k)* at all. Ch'orti' has thematic suffixes in *-i* but they are also not specific to intransitive verbs and provide little or no direct evidence of being related to Proto-Mayan **-i(k)*. Except for one possible example, *tali*, it seems that the *-i* suffix on intransitives in Ch'olti' is also a general thematic suffix that can be used on both transitives and intransitives although it does preserve the basic structure of CVC transitives.

There is also some evidence from the signs and writing strategies of the Classic-Period system for a null status marker on root intransitives. CVC intransitive verbs are sometimes written with only a logogram in the Classic Period texts as shown by the examples **CHAM** and **OCH** in Figure 106c-d above. There are, however, also spellings that include a **Ci** syllabogram following the logogram as in the 106d-e examples **HUL-li** and **OCH-chi**. Nevertheless, this **Ci** syllabogram could also be interpreted as a phonetic complement. Finally, when the root is written with syllabograms such as for **hu-li** and **ta-li** in Figure 106a-b, the normal reading strategy would indicate that the final vowel is to be omitted in the transcription and not pronounced or used as an explicit part of the verb, such as in **hu-li** > *hul*. Examples of verb-noun compounds that form new nouns clearly indicate that the transcription in such cases should be CVC and not CVC*i*.

Despite the relevance of these arguments, the evidence from Ch'ol and the strength of the reconstruction of an **-i(k)* status marker for Proto-Mayan is likely sufficient to outweigh the epigraphic argument for a null status marker on root intransitive verbs in Classic Ch'olan. That Ch'ol preserves reflexes of both the CVC transitive *-V_t* and CVC intransitive *-i* status markers from Proto-Mayan adds to the

weight of this argument. There seems to be little or no evidence that their reconstructed Proto-Mayan equivalents had anything to do with aspect. To this can be added the information that the various Ch'ol grammaticalized auxiliary particles are in themselves enough to indicate aspect, while the transitive $-V_l$ and CVC intransitive $-i$ suffixes do not stand on their own to indicate aspect. Instead, these suffixes mark the verbs as root transitives and root intransitives. Only after Ch'ol recruited nominal forms to use as incompletives were the two status markers relegated to appearance only in the context of various completive aspectual constructions. Otherwise, the reflexes of the original status markers remain much as they were in Proto-Mayan. That Ch'ol would have recreated this original paradigm independently and by chance is highly unlikely.

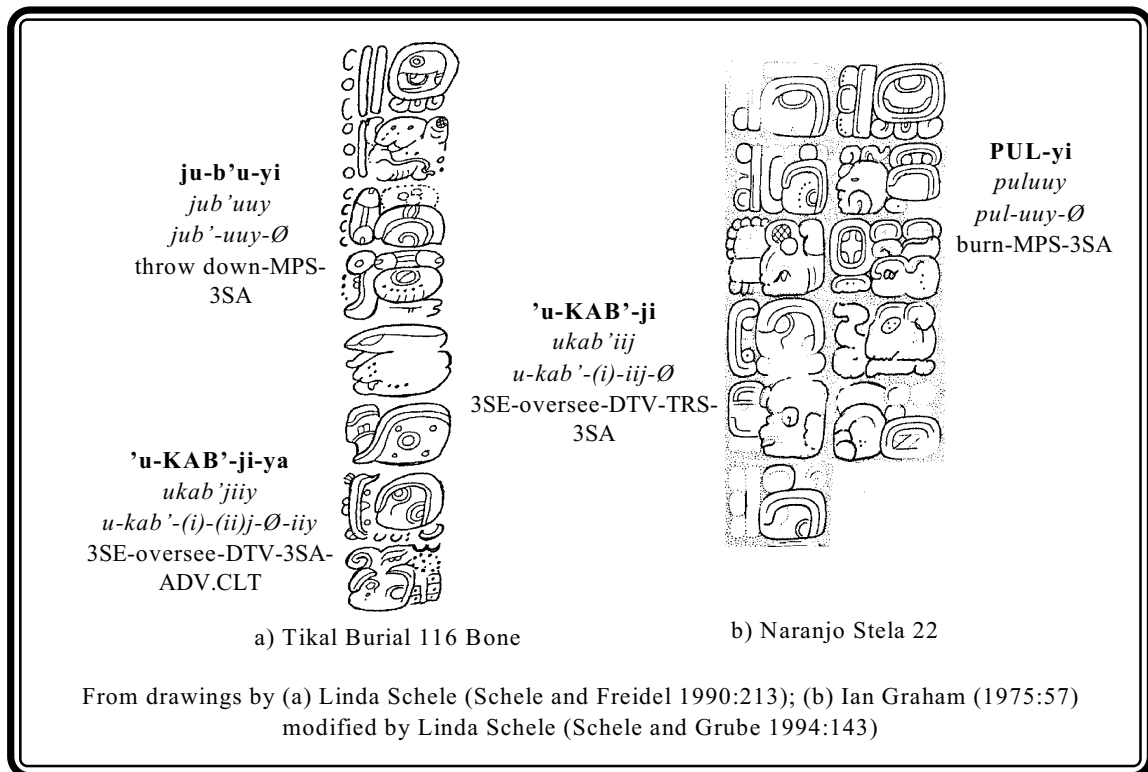


Figure 115. Two examples of $-VV_y$ mediopassives used with *ukab'i-* sentences to add information about the person who oversaw the event reported in the previous sentence.

3.3.2 *-VV_Ly* Mediopassives

3.3.2.1 Interpreting Their Glyphic Form

There is some disagreement as to how to classify a certain group of verbs in the Classic Period inscriptions other than by the *-VV_Ly* suffix which they usually take. These include verbs such as *jub* ' "to bring down, destroy; put in, install," *pul* "to burn," *tzutz* "to complete, end, finish," and several others. Examples of the first two mentioned are shown in context in Figure 115. The *-VV_Ly* suffix is written by the syllabogram **yi**, sometimes along with the final vowel of the previous syllabogram, especially in syllabic spellings of the root, and sometimes alone, especially when the root is spelled using a logogram. This **yi** syllabogram is sometimes written completely separately, as in Figure 115a. Sometimes **yi** is conflated with or incorporated into the logogram as in Figure 115b. When the root is written with syllabograms, the vowel of the final syllabogram used to write the root virtually always contains a harmonic vowel.

From an epigraphic standpoint, it is syllabic spellings such as **ju-b'u-yi** in Figure 115a that provide the main evidence for their correct transcription. As usual, the strategy is simply to drop the **i** of the final **yi** with the result being *jub* 'uuy (or *jub* 'uy if one does not accept the vowel-length hypothesis). All syllabically-written occurrences of this group of verbs attest the same vowel in the second syllabogram as in the first syllabogram used to write the root. In most cases when there is a further attachment to a verb root spelled syllabically, the vowel of the second syllabogram is the correct one to use for the suffix or enclitic. Applying the rule of thumb that syllabically written examples most accurately reproduce the correct phonetic form of the word, the suffix in this case is harmonic. Its vowel echoes the vowel of the root. There are exceptions to this general rule concerning syllabic spellings, but their frequency is so low that they are easily noticeable as exceptions rather than the rule.

Again applying our rule of thumb, the syllabically written examples should almost always be taken as most accurately reflecting the phonetic form of the word.

3.3.2.2 Overview of $-VV_{ly}$ Semantic Set

Most of these verbs occur with other affixes only rarely, or not at all, in the Classic texts. When these verbs occur with a $-VV_{ly}$ suffix, the sentences have only one argument and they do not take ergative pronouns. So at least in this form they are intransitive. There has been less agreement about whether these forms represent derived intransitives or whether the verb roots themselves are intransitive. The problems involved in classifying and translating these verb forms are more complex than those encountered in transcribing them. Fought (1972:46) identifies a group of verbs in Ch'orti' which he classifies as belonging to the “*vi* system.” Of them he states, “Most of these roots have to do with motion or a state transition, e.g. *lum* ‘pass’, *t’ab* ‘climb’, *cham* ‘die’, *pur* ‘burn’, *och* ‘enter’ *lok* ‘leave’, etc.” Fought (1984:49,53) interprets the group of verbs taking “ $-Vy$ ” “thematic suffixes” in the completive aspect as root intransitives in Ch'orti'. Wisdom (1950) had earlier included a longer list in his

Ch'orti' intransitive verbs in $-V_{ly}$ (also written as $-V_{lih}$)	
<i>buruih</i>	burn of itself, burn up
<i>chamay, chamaih</i>	die, wilt, droop, die out (as a fire or volcano), dead, wilted
<i>emaih</i>	go down, be low
<i>hopoih</i>	jump, leap, spring
<i>k'otoih</i>	arrive, come, frequent a place
<i>karaih</i>	be drunk, . . .
<i>lok'oih</i>	leave, go away, come out (as from the body), result
<i>numuy, numuih</i>	pass, go by, come out, pass (as time passes), trail (as a vine)
<i>ochoih</i>	enter, come about, occur, come in (as a time or season), enter into (as a sickness into the body)
<i>ok'oih</i>	rot, decay, spoil, rotten
<i>ok'oih</i>	be broken or divided, break or divide of itself
<i>putz'wih, puç'uih</i>	go away, flee, escape, go into hiding
<i>topoih, top'oih?</i>	fly, rise up (a fog), soar
<i>t'abaih</i>	go up, climb up, . . . , rising
<i>tz'amaih</i>	be or get wet, bathe

(Based upon data from Wisdom (1950) and transcription by Stross (2000))

Figure 116. Some intransitive verbs in Ch'orti' that take the $-V_{ly}$ thematic suffix

dictionary, among them, *jopoy* “jump, leap,” *k’otoy* “arrive, come,” *karay* “be drunk,” *numuy* “pass, pass by,” *ok’oy* “rot, decay; “be broken,” *top’oy* “fly, rise up (a fog),” and *tz’amay* “be or get wet, bathe” using the ALMG orthography. Others included by Wisdom are shown as well in Figure 116.

In his analysis of Ch’olti, Fought found a similar but smaller list of prospective “*Vi*” (*-V_iy*) verbs as can be seen in Figure 117. To those that have been already listed for Ch’orti’, only *wanay* “sleep” is added. However, I have been unable to find evidence of its existence as such in its sister language, Ch’orti’, which instead attests the form *wayan* and is based upon the root *way*. The form *wanay* may be derived through

Fought’s Transcription (stems only)	ALMG Orthography + Suffix	Fought’s Translation
<i>cham</i>	<i>chamay</i>	“die”
<i>c’ot</i>	<i>k’otoy</i>	“arrive”
<i>loc’</i>	<i>lok’oy</i>	“leave”
<i>em</i>	<i>ehmay</i>	“descend”
<i>taab</i>	<i>t’ab’ay</i>	“rise”
<i>och</i>	<i>ochoy</i>	“enter”
<i>tzam</i>	<i>tz’amay</i>	“get wet”
<i>pul</i>	<i>puluy</i>	“burn”
<i>putz</i>	<i>putz’uy</i>	“flee”
<i>uan</i>	<i>wanay</i>	“sleep”

(Adapted from Fought 1984:53)

Figure 117. Some *-V_iy* intransitives in Ch’olti’

analogy and transposition of the /y/ and /n/ of *wayan* in the formation of the completive perhaps to avoid the form **wayay*. This is similar to what happens in the formation of the participle *puyul* based upon the form *puluy*. *Puyul* substitutes for the otherwise expected form **pulul* (cf. Morán 1935a:18). The Ch’olti’ form seems to be based upon a consonant substitution between the /y/ and the /n/ for which there is no evidence present in Ch’orti’. In both instances, the forms have likely metathesized in Ch’olti’ but not in its sister language Ch’orti’.¹⁰⁵

The non-CVC forms in *-ay*, such as *emai* (*ejmay*), which are also present in Ch’orti’ but have not been itemized, will not be explicitly discussed here. It is, however,

¹⁰⁵Since both *wanay* and *puyul* are Ch’olti’ innovations and neither is attested in Ch’orti’, they also serve as additional evidence that the two languages stand not in a relationship of parent to child. Instead, the Colonial version of Ch’orti’ was Ch’olti’'s sister language.

likely related to the $-V_{ly}$ thematic-suffix/intransitive-status verb suffix although the vowel of the suffix is always /a/ and so is not harmonic. It is limited to use with non-CVC stems including VC stems.

3.3.2.3 Case in Point: Transitive Root *pul* > *puluuy*

The status of most of these $-VV_{ly}$ intransitive verbs seems to be the same in both Ch'olti' and Ch'orti' as noted by Fought (1984). One particular verb among them, however, provides evidence of a difference that reflects a stage in a long-term historical development – possibly beginning in the Classic Period but, if not, soon thereafter – and continuing up to the current usage of the $-V_{ly}$ suffix in modern Ch'orti'. After drawing upon Fought (1967) for examples and evidence of this class in Ch'orti', Kaufman and Norman (1984:103-104) proceed to Morán's (1935d) *Arte y Diccionario en Lengua Cholti'* and find, as already mentioned, some of the same verbs and verb forms in Ch'olti', drawing them from various sections of the document. Like Fought (1984:53), they also include *puluy* among them and reference page 18 of the *Arte en Lengua Cholti'*. But at that point they, along with Fought in his Ch'olti' analysis, are actually parting company with Morán although this is not acknowledged by them. The early 17th Century linguist in this, the grammar portion of his writings, indicates that he considers *puluy* (*pului*) to be the passive preterite form of that verb. In his Chapter 6 entitled “*De la Formacion de los Pasivos*” (“On the Formation of the Passives”) he states:

Pulu por quemar, haçe *pulal*, el preterito *pului*, el futuro *xpulik*, participio *puyul*. quemado; *puyul_ix*, ya esta quemado. (Morán 1935a:18)

This is my translation of this analysis along with a more explicit rendition of the grammatical analysis of each form in brackets:

Pulu [transitive complete/incomplete], “to burn” becomes *pulal* [passive incomplete], in the preterite *pului* [passive complete], the future *xpulik* [future passive], the participle *puyul* [passive participle] “burned,” *puyulix* [passive participle plus deictic enclitic], “it is already burned.”

Morán considers *pulu* to be a transitive verb that has irregular passive forms and states it explicitly in the passage just cited. Of course, Morán is often criticized for some of his grammatical misanalysis, so perhaps this could also be dismissed as just another example of it. However, there is extensive evidence that it is actually correct, at least at its core. First, Morán is quite aware of the group of intransitive verbs in Ch’olti’ to which Fought and Kaufman and Norman are referring. In fact, he discusses one of them, *uanai*, in the very next chapter. It is clear that he considers it a member of a different class of verbs from *puluy*. This is even reflected in the incomplete form of the verb which he uses throughout his grammar and dictionary as a substitute for the otherwise missing infinitive for ease of reference. This usage alone provides a clear distinction between the transitive *pulu* and the “neutral” *uanel*, “neutral” being the term Morán uses for intransitive verbs other than passives.

It is hard to imagine that Morán would have presented these different forms for particular verbs had he not actually encountered them among the native speakers.¹⁰⁶ Otherwise he could have simply classified it as one of the intransitive/neutral verbs and spared himself the extra explanation of the irregularities.¹⁰⁷ Morán’s classification of *pul* as a root transitive receives further backing from the entry *pulu* in the *Vocabulario* for “quemar,” “to burn”. This is the form that Morán uses repeatedly in his vocabulary for root transitives. But if that is not convincing enough, he has “quemado” for *pulb’il*

¹⁰⁶Note that although Morán is referred to here as a unique individual, the manuscript was written by more than one person. Internal references to him as a third party, as for example on page 23 of the *Arte*, make it clear that the work had more than one author.

¹⁰⁷Morán’s category of “neutral” verbs includes a mixture of intransitive and mediopassive verb forms, including mediopassives in *-pa(j)*.

(Morán 1935c:55). The suffix *-b'il* occurs only on transitive verbs and forms a passive participle.¹⁰⁸ Note that this is not a “past” or “perfect” participle but a “passive” participle which can only be formed from a transitive stem.

Another major factor to consider is that *pul* is a root-transitive verb in all but one Ch'olan language. Historical evidence for the transitive character of the root can be found in all the Colonial and Modern Ch'olan languages except Ch'orti'. The Acalan Chontal document (Paxbolon et al. 1614:165.21-22) contains this passage: *machca ucanan ti ciçin ubixel ya chamcel ukalob upuleob*. “Those who cared for the idols went there and they [the idols] were brought by them and **they burned them**.” It is a straightforward, underived transitive verb. For Modern Chontal, Knowles lists *pul* as a transitive verb meaning “to burn s[ome] t[hing].” Ch'ol (Hopkins and Josserand 1988g:p9) attests *pul* as a transitive verb as well: *tzi pulu* “he/she burned it.”¹⁰⁹ Kaufman and Norman (1984:129) note that there are no cognates for *pul* meaning “burn” outside of Ch'olan and they do classify *pul* as a transitive verb in Proto-Ch'olan (Kaufman and Norman 1984:109).¹¹⁰

At least in early 17th century Ch'olti', *pul* was still a root-transitive verb with the combined incomplete and complete active form *pulu*. So it is Ch'orti' that, at least by the early 20th century, seems to be the innovator here. As noted by Wichmann (1999:38) *puluy* does indeed belong to a group of intransitive verbs that take the thematic suffix *-V_Ly*. Although Wichmann does not employ the term “thematic suffix” in the same way as Fought, *-V_Ly* does indeed occur on some root intransitives although other root

¹⁰⁸Kaufman and Norman (1984:99) call this a “perfect participle.” However, in most cases, the meaning is passive and not active. In any case, the main point here is that it is used only for transitive verbs.

¹⁰⁹It should, however, be noted that it is also attested as an intransitive as well in Hopkins and Josserand's “Chol Mayan Vocabulary Survey Database” (1988f:p9): “*woli pulel*.”

¹¹⁰Note that Kaufman and Norman's “Proto-Cholan Vocabulary List” seems to contradict their earlier classification of *pului* as a root intransitive in Ch'olti' in their discussion of Ch'olti' grammar (Kaufman and Norman 1984:104). In the vocabulary section, *pul* is classified as a transitive root in Proto-Ch'olan and **all** of the Ch'olan languages are listed as attesting it without further comment. This may just be a difference in analysis due to the divided primary responsibilities, Kaufman for the vocabulary and Norman for the grammar (cf. Kaufman and Norman 1984:77)

intransitives take different thematic suffixes. The meanings of these verbs also reflect their intransitive status, so *puruy* (*buruih*) does mean “burn of itself, burn up” as noted by Wisdom (1950:593).

Pul “to burn” occurs often in the Classic Period texts, usually with a $-VV_{LY}$ suffix.¹¹¹ Most of the passages in which it occurs have to do with burning. The contexts seem mostly related to battle and war. It is important for the present purposes to note that such sentences are often followed by a statement about who “oversaw it” (*ukab’jiiy*) and so was responsible for the specific action. An example of this combination has already been included in Figure 115a. Such information is more likely to be forthcoming after sentences containing mediopassive rather than root intransitive verb forms although that is somewhat dependent upon the meaning of the word and the type of mediopassive. Such explanatory statements also often follow sentences with regular passive verbs. So, at least with this verb, the mediopassive suffix implies a type of statement that renders meaningful a question concerning the identity of the agent.

Barbara MacLeod (1997:15) suggested some time ago that this form represented a mediopassive rather than a passive or root intransitive. Although recognizing that the Eastern Ch’olan $-V_{LY}$ is currently an intransitive suffix or status marker, it surely developed diachronically from this Classic Ch’olan mediopassive suffix. Morán likely did not clearly recognize the distinction between mediopassive and passive and so the classification of *puluy* as a “passive” form does not actually contradict this view at all. In fact, in his discussion of “neutral verbs, he mixes what are mediopassives in *-pa(h)* with non-CVC intransitives stating that there is a lot of irregularity within the group. John

¹¹¹There are examples of **pu-la-ja ti k’a-K’AK’** at Yula (Lintel 1) and **pu-lu-ji-ya ’u-k’a-k’a** at Chichen Itza (Casa Colorada) which transcribed likely represent the passive forms *puhlaj ti k’ahk’* and *puhljiy k’ahk’*. These are clearly Ch’olan and not Yukatekan verb forms although there is a possibility that the meaning of this root in the north may have been “to throw” as it is in Colonial Yukatek (cf. Bolles 2001) instead of “to burn.” It may refer to “throwing of the fire” similar to the “throwing” or “scattering” rites referred to differently at other Classic sites further south as argued by Eric Boot (1998:5-6). Because of this uncertainty, these passages will not be used here to strengthen the argument that *pul* “to burn” is a root transitive verb that takes a mediopassive *puluy* form. However, these two passages could also represent the passive form of “to burn” in the sense of “was burned in the fire” and “it was burned, the fire of . . .”

Robertson (Houston et al. 2000a:332; Houston et al. 2001a:31) reconstructs the $-V_{ly}$ suffix as inflection for intransitive positionals in Greater Tzeltalan (or “Common Wasteko-Ch’olan”), as a passive for “Pre-Script Ch’olti’an” and as a mediopassive in the Classic-Period script. At any rate, by the time of Colonial Ch’olti’, it had become mainly an intransitive suffix although Robertson acknowledges that Morán had considered *puluy* to be a passive form.

3.3.2.4 Characterization of “Mediopassive” and “Middle Voice” Constructions

Overall, the history of the $-VV_{ly}$ suffix in Classic Ch’olan and on into Eastern Ch’olan times is not one of a settled verb form with consistent or static characteristics or stable set membership. Since Houston et al. (2000a) have made it one of the two most important criteria for excluding some of the Ch’olan languages from active participation in the texts of the Classic Period,¹¹² it is important that this set of verbs be examined in detail. Important will be the basic characteristics of their roots, the changes in set membership at different times, and the gradual reinterpretation of the of the $-VV_{ly}$ suffix throughout its history.

The first step will be to examine some of the possible behaviors, meanings, and connotations expressed by forms characterized as “mediopassive” or “middle voice” by linguists.¹¹³ Most definitions of “middle voice” refer back to its usage to describe

. . . verbs in Ancient Greek whose sense was broadly reflexive: e.g.,
schematically, I bought-MIDDLE house ‘I bought myself a house’. Called ‘middle’
because seen as intermediate between active and passive. (Matthews 1997)

¹¹²The other criterion they propose is the existence of the $-hC-aj$ passive.

¹¹³In order to avoid making these somewhat ambiguous terms even more difficult to define, “mediopassive” and “middle voice” will be used here as homonyms.

Most often, its application is then extended allowing it to be applied to

. . . similar reflexive forms in other languages. Also of verbs in intransitive constructions that are understood reflexively: e.g. *shaved* in *I shaved*, meaning ‘I shaved myself’. Also of intransitives with a passive-like relation to their subject: e.g. *cuts* in *This stone cuts easily*, meaning ‘can be cut easily’. (Matthews 1997)

In Spanish, such reflexive mediopassives are used, for example, in messages on frequently used signs such as “Se habla Español” or “Aquí se vende autos.” While these sentences mean “Spanish spoken” and “Cars sold here” respectively in English, a more literal translation might be “Spanish speaks itself” and “Cars sell themselves here.” The first would mean little in English and the second, especially if used in an advertisement, would mean something else altogether.

Sometimes the Spanish reflexive construction with *se* is capable of being translated in two different ways into English as for example “*cerrarse* ‘to shut (intransitive)’ or ‘to get shut (mediopassive)’ ” (Pountain 1994:124). This colloquial construction with “get” is often how the mediopassive in $-VV_Ly$ in Classic texts is characterized by epigraphers. Indeed, that does seem to work well as a translation in some cases, especially for verbs such as *puluy* “it got burned” because it still leaves some room for the question as to who was responsible for the burning. As already noted, that information is sometimes immediately forthcoming in the sentence following verbs taking $-VV_Ly$ suffixes in the Classic-Period texts. This is especially true for *puluy*. Mediopassive or middle-voice sentences in English such as “These kinds of walls paint easily” on the other hand “prefer generic subjects, . . . are difficult without adverbial support, . . . and the lost subject is not syntactically available” (Sadler and Spencer 1998:221-222). As we shall see, some of the mediopassive verbs in $-VV_Ly$ also fall into the latter category.

A somewhat different emphasis is provided by the definition of “mediopassive voice” offered by Foley and Van Valin (1985:322-23). According to them “Mediopassive voice is a passive voice in which the verb has stative meaning, and the actor is not expressed.” An example they give is “my child has been beaten.” This view is interesting because it seems to allow for at least some mediopassives that are very similar to passives. When analyzing a different mediopassive in modern Ch’orti’, that in the form *-p(ah)*, Wichmann (1999:69) has this to say:

Syntactically this suffix causes intransitivization. . . . The syntactic behavior is difficult to distinguish from passives, since an agent causing the action may be introduced by *-men* just as is the case with passives. Forms like *ach-p* ‘to get up,’ *sut-p* ‘to return’ or *ket-p* ‘to stay’ are, however, clearly mediopassive and not passive in meaning.

Another very important characteristic of the mediopassive voice is that the semantic content of a particular verb has a great effect upon both its capacity for being used in mediopassive constructions and upon the allowable syntax. Sarah Fagan (1992:7) notes this characteristic of “middles” and emphasizes “the importance of considering the semantic properties of the linguistic phenomena under consideration.” She further notes: “We cannot ignore the complex interaction of semantic and syntactic features that underlie any given construction” (Fagan 1992:7). This makes it especially difficult to formulate a general rule as to how mediopassives should be interpreted and translated into another language and in fact suggests that the semantic character of each lexeme must play as important a role as its morphological suffix. In other words, the meaning of the root can directly affect both the allowable syntax and how the grammatical form itself is to be interpreted. But not even the dependence of mediopassive forms upon semantics can explain how all of the attested words could take a *-VV_{ly}* mediopassive suffix in the

Classic texts. Why this is true should become clearer after examining words that do take this suffix.

3.3.2.5 Transitive Root: *tzutz* > *tzutzuuy*

One of the earliest and most common examples of a verb occurring with a mediopassive suffix in the Classic Period is *tzutzuy*. The “hand-bauble” logogram, T218, was first deciphered as **TZUTZ** “end, complete” by David Stuart (2001:11) in 1990. Hruby and Robertson (2001:29) suggest that pictorially, the “bauble”

represents a “weaving pin or bodkin.” Although not explicitly mentioned by them, there is extremely good linguistic evidence that they are right. In Modern Tzotzil (Laughlin 1975:97-97) *tzutzob*’ is a “small bobbin,” *tzutzub*’ is a “bodkin,” and *tzutzav* refers to “the end of cloth or loom.” So what is pictured is probably a hand tying or looping the thread on the end of an item after it has been woven similar to the way tassels are tied at the ends of a scarf. Figure 118 shows three different forms the transitive verb-root *tzutz* can take. Figure 118a shows it with the root transitive marker and the 3rd person singular ergative pronoun *ututzuw*. Figure 118b is an example of it derived as a passive *tzuhtzaj*, and Figure 118c as a derived mediopassive *tzutzuuy*.

There are no straightforward reflexes of this word attested so far in any of the Ch’olan language sources although it is present in Tzeltalan, Tojolab’al, and Yucatekan. It is a transitive verb meaning “to close” in Colonial Yucatek (Bolles 2001:3589). Its

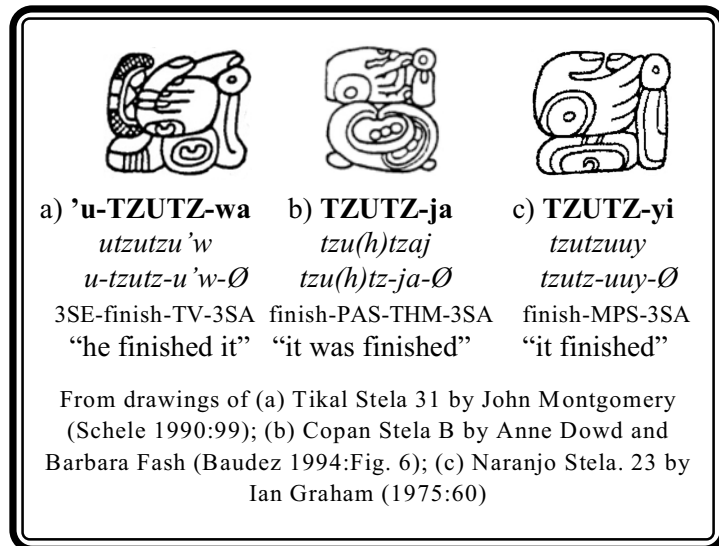


Figure 118. Three different forms attested for the verb root *tzutz*

status as a transitive root is verified by its occurrence in transitive forms and by Bricker et al.'s (1998:45) dictionary entry of it as a transitive verb meaning “close, fill up, obstruct, scar.” For Proto-Tzeltal-Tzotzil, Kaufman (1972:97) analyzes it as an intransitive verb meaning “terminarse” (“to end”). It is also an intransitive root in Colonial Tzotzil since the transitive form *tzutzes* is derived using a causative suffix. However, there is also somewhat contradictory evidence that comes in the form of *tsutsel* and *tsutstesel* both analyzed as transitive verbs in the Tzeltal of Bachajón (Slocum et al. 1999:131), although the former may just be a contraction of the latter form. Also, the Tojolab'al data from Lenkersdorf (1979:337) indicate that this root can take both transitive and intransitive suffixes as *tzutzu* “acabar, terminar” and *tzutzi* “acabarse, terminar” respectively. It is no accident that both the attested Spanish equivalents and English translations such as “finish, end, complete” can be used as either transitive or intransitive verbs. Such variation surely has its source in the semantics of these and similar words.

Despite some variation, *tzutz* is, nevertheless, primarily a transitive root in the three language families in which it still occurs. There is even less doubt that *tzutz* is used as a transitive verb root in the Classic Period texts, since it occurs in both transitive, mediopassive, and passive forms. In fact, it is one of the few transitive verb roots that are attested as inflected for both *-VV_{ly}* mediopassive and *-hC-aj* passive in the Classic-Period texts.

Dates in 20-year periods or <i>k'atuns</i> (<i>Fechas en periodos de 20 años o k'atuns</i>)	<i>u-tzutz-uw</i> Active (<i>u-tzutz-uw Activo</i>)	<i>tzutz-uy</i> Middle (<i>tzutz-uy Medio</i>)	<i>tzu-[h]-tz-aj</i> Passive (<i>tzu-[h]-tz-aj Pasivo</i>)
8.17	● ¹		
8.18		● ²	
8.19			
9.0	● ³	● ⁴	
9.1		● ⁵	
9.2	● ⁶		
9.3	● ⁷ ● ⁸	● ⁹ ● ¹⁰	
9.4			
9.5			
9.6		● ^{11***}	
9.7		● ¹²	
9.8	● ¹³		
9.9		● ¹⁴	
9.10	● ¹⁵		
9.11		● ¹⁶	
9.12	● ¹⁷	● ¹⁸	● ¹⁹ ● ²⁰
9.13	● ²¹	● ²²	● ²³ ● ²⁴ ● ²⁵
9.14	● ²⁶	● ²⁷ ● ²⁸ ● ²⁹	
9.15		● ³⁰	● ³¹ ● ³² ● ³³
9.16		● ³⁴ ● ³⁵	● ³⁶ ● ³⁷
9.17			● ³⁸
9.18		● ³⁹	● ⁴⁰ ● ⁴¹

(From Hruby and Robertson 2001:35)

Figure 119. Chart by Hruby and Robertson showing distribution of *tzutz* verbal forms over time

3.3.2.5.1 Evaluating Alternate Interpretation of Early *tzutz* Forms

In a very interesting paper that provides a list of many of this verb's occurrences, Hruby and Robertson (2001) find only active transitive and mediopassive examples in the Early-Classic texts. Later, passive examples begin to occur although mediopassive examples continue, some occurring at the same sites and, in one case, on the same

monument. Figure 119 shows an overview of the forms taken by this verb over time, arranged by date within Long Count 20-year *Winikhaab'* periods. The Long Count 8.17 begins in A.D. 376 and 9.18 ends in A.D. 810. They interpret this data as an indication that

the verb *tzutz* reveals an unusual conservative pattern that is unlike almost all other transitive verbs, because the only attested form for the passive *tzutz-uy* in the Early Classic period (300-500 A.D.), when we would have expected *tzu-[h]-tz-aj*, since *-h-aj* is the normal passive. It was not until the Late Classic that it began to act like the other transitive verbs in taking the unmarked passive *tzu-[h]-tz-aj*. (Hruby and Robertson 2001:26-27)

What they are, in effect, proposing is that *tzutz-uy* (*tzutzuuy*) is really an ossified passive form which is single-handedly holding the *-VV_Ly* suffix over as a Pre-Classic-Period passive marker. As they put it, “Thus, the *tzutz-uy* was the passive and medio-passive form of the verb until the take-over by *-h-...-aj*” (Hruby and Robertson 2001:26). Robertson (Houston et al. 2000a:331-333) has reconstructed such a passive based upon the presence of a *-Vr* passive in Poqomchi'. However, other than in the Mamean-K'iche'an language group to which Poqomchi' belongs, there is no evidence of reflexes of a *-Vy* passive in any Mayan language. Even in that language family, according to Robertson (Houston et al. 2000a:332) this change would have occurred long after Greater Tzeltalan had split from the Eastern group of Mayan languages. Robertson does not explicitly state whether he suggests a borrowing into Ch'olti'an from Poqomam or whether he is simply suggesting an analogous independent change in Ch'olti'an. There is surely no direct evidence of the existence of a passive in *-V_Ly* in any language directly on the path from Proto-Mayan to Classic Ch'olan. In order to fill this gap, Robertson creates an interim language which he calls either “Pre-Classic Ch'olti'an” (Houston et al. 2000a:332) or “Pre-Script” (Hruby and Robertson 2001:31). It is in this completely

undocumented language, which purportedly existed after the suggested split from Ch'ol in A.D. 100 and after a slightly later split from Chontal, that $-V_{ly}$ would have become a passive on its way from being a positional suffix in Greater Tzeltalan to being a mediopassive suffix in the Classic-Period script.

8.17.17.0.0	A.D. 393	tz'a-pa-ja 'u-LAKAM ?	Bejucal Stela
8.18.17.0.0	A.D. 414	K'AL-ja TUN	
		tz'a-pa-ja 'u-"marker"	Tikal Marcador
8.19.10.0.0	A.D. 426	tz'a-pa-ja u-LAKAM-TUN-ni	El Zapote Stela 1
9.0.4.0.0	A.D. 439	tz'a-pa-ja 'u-LAKAM-TUN	El Zapote St. 5
9.0.10.0.0	A.D. 445	K'AL-ja-HUN	Tikal Stela 31
9.0.14.0.0	A.D. 450	mu-ka-ja	Río Azul Tomb

Figure 120. Some early passive forms in $-hC-aj$

It should first be noted that the $-hC-aj$ passive morpheme is by no means absent in any part of the whole period at least from 8.17.17.0.0 (A.D. 393) on. Instead, as Figure 120 shows, it was present even in the earliest time period shown in Hruby and Robertson's chart which is 8.17 (A.D. 376), as shown in Figure 119. Of course, they do not imply that it is absent either, just that it has not taken effect for this one particular verb. It should also be noted that, based upon their data alone,

the time between the first attestation of *tzutzuuy* and the first example of *tzuhztaj* is not as long as they suggest. The Caracol Stela 14 example in Figure 121 dated 9.6 (A.D. 554) is undoubtedly *tzuhztaj*, so the first verified appearance of this verb using the $-hC-aj$ passive found so far should be placed about 120 years earlier instead of at 9.12. (A.D. 672).¹¹⁴

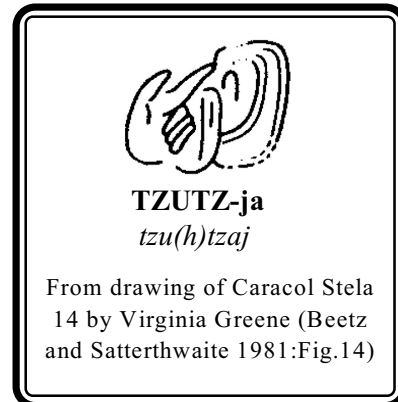


Figure 121. *Tzuhztaj* passive on Caracol Stela 14.

¹¹⁴Note that this may simply be an oversight in the table since the passage above quoted from Hruby and Robertson mentions only the period from A.D. 300 to 500.

There are several reasons why one might question Hruby and Robertson's "claim that the spread of the "new" Classic Ch'olti'an passive, *-h...-aj* was somewhat uneven, however, with *tzutz* maintaining the *-VV_{ly}* passive in the Early-Classic Period." The first and most obvious is that almost all of the other verbs that take the *-VV_{ly}* suffix in the Classic Period **never** occur with the *-hC-aj* suffix.

Figure 122 shows both early and late examples of verbs that occur with the *-VV_{ly}* suffix. Although not occurring as early as the *tzutzuuy* examples, it is the late examples that would seem important if one were to construct a parallel argument for the other verbs. Since they not only occurred very late with *-V_{ly}* mediopassive suffixes but also did not occur with an *-hC-aj* suffix even later on, **they would have been even more resistant** to changing to the new "unmarked" passive form. And what is one to make of *puluy*. It only occurs as *puhlaj* very late at Chichen Itzaj derived as a passive by *-hC-aj*. Does that mean that the root *pul* held out and retained a supposed *-VV_{ly}* passive even longer before adopting the "new" passive? Of course that logic would not be correct, but then neither would it be correct for *tzutz*. The chart in Figure 119 therefore **provides no evidence at all** that the early occurrences of *tzutzuy* are passive rather than mediopassive.

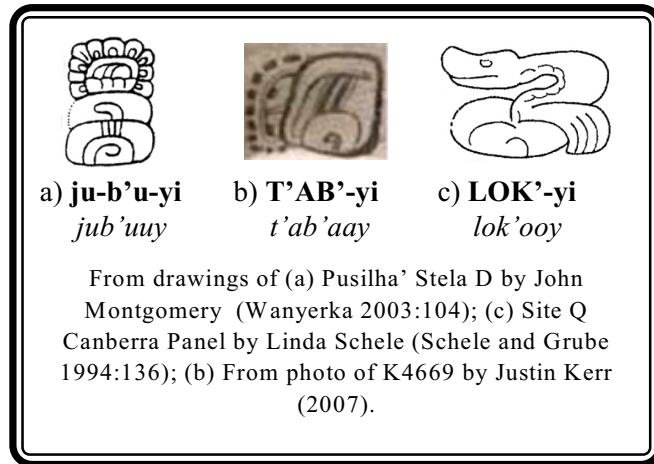


Figure 122. Some verbs derived by the *-V_{ly}* mediopassive suffix that are not attested with *-hC-aj* passive suffixes.

3.3.2.5.2 More Likely Immediate Source for *-VV_{ly}* Mediopassive Suffix

Instead of the proposal concerning the source of the *-VV_{ly}* suffix offered by Hruby and Robertson, there is a simpler and more straightforward approach that actually corresponds better with both the character of mediopassives and the nature of the verb set

that includes *tzutz*. It draws upon the general stative nature of the mediopassive mood and middle voice. It also relies upon the propensity of this particular mediopassive suffix to be used with certain verbs based upon their semantic qualities. That this group of verbs is widely recognized as being distinguished by semantic implications of “motion and change of state” (cf. Fought (1972:46; Houston et al. 2000a:330, 332; Hruby and Robertson 2001:32; Wichmann 1999:22) also implies that such an approach might lead toward a better reconstruction of the *-VV_{ly}* suffix’s possible migration on its way from being a positional to becoming a Classic Ch’olan mediopassive.

I would agree with Hruby and Robertson, and many others, that the *-VV_{ly}* suffix occurs on verbs of motion and change of state. One should probably also add the description “verbs of state” to the set criteria since some, including *tzutzuy*, describe more an end-state than a change of state. But it does not seem appropriate to refer to the difference between the mediopassive in *-VV_{ly}* and the passive in *-hC-aj* as marked and unmarked versions of the passive voice (cf. Hruby and Robertson 2001:34), even if one is speaking diachronically. Instead, as we have already discussed, it is usual for mediopassive and middle voice forms to occur more often with words having a particular semantic character in many different languages. It is that set of semantic characteristics to which the occurrence of the *-VV_{ly}* on *tzutz* should be attributed.

It is more likely that the semantics of the word root *tzutz*, one that encompasses connotations similar to English “finish, end, complete,” that drove the selection of the mediopassive form. If a speaker or scribe placed the emphasis on the “end” connotation of a time period without explicit reference to a person in charge, the mediopassive in *-VV_{ly}* would be more appropriate. With that connotation, a possible actor would be further removed or perhaps put out of explicit consideration altogether, at least semantically. If the connotation were closer to English “got completed” the actor would be less removed and more open to be explicitly broached in an oblique manner, along the lines of “how did it get completed.” However, if instead, the word were written using the passive suffix in *-hC-aj*, with the connotation “it was completed,” a mention of the actor

in an oblique clause or following sentence would be even more likely. Such a question concerning an actor or agent is surely in place as evidenced by the examples of this verb in precisely the same contexts inflected as an active transitive verb.

There is nothing in the semantic characteristics of this root that would make it unlikely to appear in any of the three forms. Thus the difference in selection of the form, whether transitive, passive, or mediopassive, likely indicates a real difference in the author's perspective. With the emphasis on who was in charge, on who brought an era to an end and on who governed during the era, the more likely verb form would have been an active transitive. If one wanted to at least allow for raising such a question in the mind of the reader, the passive would have been appropriate. Finally, if one simply wanted to reference the end of a period in a neutral sort of way, the mediopassive would have served the purpose well. One should, however, also keep in mind that the meaning and connotation of specific words would also play a role in the theoretical availability of questions regarding a possible actor even if the mediopassive form was selected.

Thus, one of the main problems with the Hruby and Robertson explanation for the occurrence of the mediopassive and passive forms of *tzutz* is that it forces one, a priori, to place the reason for lack of *-hC-aj* in earlier forms in the equivalency of the *-hC-aj* and *-VV₁y* suffixes as passives. It shuts out, without apparent justification, the possibility that in those particular earlier inscriptions the authors simply chose

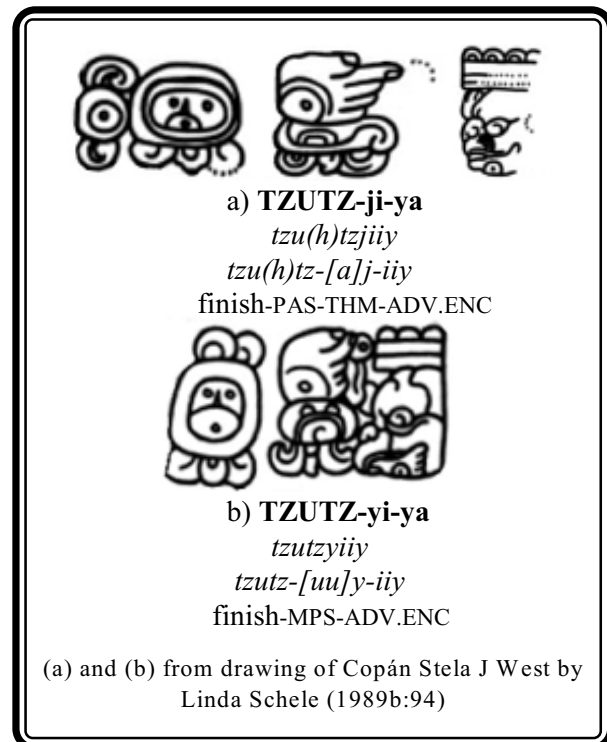


Figure 123. Mediopassive and passive forms of *tzutz* on same monument

the mediopassive form for its meaning and connotations. Instead, there is indeed direct evidence that both forms of the verb *tzutz* exist simultaneously even in the same inscription as shown in Figure 123.¹¹⁵ Since it is by no means an early inscription, it would be hard to argue that there was still a battle raging between an old and a new passive form on solely one verb root. Instead of the forms representing a passive at two different time frames, it is much more likely that they represent two different forms, passive and mediopassive (or middle voice), each with different meanings and connotations. The difference is semantic and synchronic. These two forms do not simply represent the same semantic characteristics at two different diachronic time frames.

Finally, Robertson's overall theory concerning the diachronic development of the *-VV_Ly* suffix from a Greater Tzeltalan positional suffix, based upon de Ara's "Tzendal" (Tzeltal, Colonial Tzeltal) evidence, to a passive in "Pre-Classic Ch'olti'an," and finally to a "Classic Ch'olti'an" mediopassive seems overly complex. As already noted, it also relies upon the existence of a language stage for which, in this particular context, there seems to be no evidence other than serving the purpose of providing space for an intermediate step in the proposed history of the *-VV_Ly* suffix. It is surely not needed to allow for a *-VV_Ly* positional form, possibly reconstructible for Greater Tzeltalan, to smoothly change into to a Classic-Period mediopassive form.

One need only examine the nature of intransitive positionals as adjectivally based to see how similar they are to mediopassives. Positionals describe a position someone or something is in. One comes perhaps closest to this in English translation by using a participle or gerund. So *chumul* is best translated as "seated" or "sitting." The verb form *chumlaj* states that the subject "is/was sitting" or "is/was seated," not in the sense of an English passive, but in the sense of "being in a seated state (or "position")." An even more penetrating example comes in the form of the verb *patlaj* or *patwaan*. Its meaning

¹¹⁵Note that both the passive and mediopassive forms in these two examples have the same enclitic attached. This enclitic will be discussed in great detail later. It is attached here because the two events being mentioned took place in a very distant past time. This enclitic is not limited to either passive or mediopassive forms. However, adding this enclitic as well as other enclitics and suffixes to such forms often causes elision especially of the previous vowel as is the case here.

centers around “form, build.” While some might prefer to translate *chumlaj* as “he sits/sat down,” a similar interpretation would not fit here in the case of *patlaj*. “It formed” or “it built” would miss the mark. A **passive** meaning along the lines of “it was formed” would **not correctly correspond** to the grammatical category. If instead one interpreted “it was formed/built” as a copula and a predicate nominative, “it was/is in a built/formed state,” both the form and the meaning would become understandable. In Spanish, it would equate to the difference between “*está/estuve construido*” and “*es/fue construido*,” with the latter being the most appropriate interpretation.

It is this stative connotation of positionals that makes them semantically very close to mediopassives although not identical with them. So if Greater Tzeltalan did indeed include a $-V_{ly}$ positional suffix, a possibility suggested by the Tzendal (Colonial Tzeltal) evidence, there is no need to reconstruct a stage during which it was used as a passive in order to justify the move from positional to mediopassive. Instead, positionals seem to be even closer semantically to mediopassives than they are to passives. Such a reinterpretation of a $-VV_{ly}$ positional suffix could easily take place seamlessly within a language without any intermediate steps involving passives.¹¹⁶

The more general point argued by Hruby and Robertson (2001), that there are changes taking place in the interpretation and use of the $-VV_{ly}$ suffix not only in the Classic period but also in the Postclassic, Colonial, and more Modern times, is well taken. However, the evidence throughout that whole period does not point toward a reinterpretation of it from a passive to a mediopassive suffix. Instead, reviewing the Classic Ch’olan, Colonial Ch’olti’, and Modern Ch’orti’ use of this suffix will provide instead evidence of a change from use as a mediopassive to use an intransitive suffix on verbs of motion, change of state, and state.

The two verb roots that have already been discussed, *pul* and *tzutz*, both provide strong comparative evidence of the transitive character of their roots. This discussion

¹¹⁶Robertson argues for an intermediate passive stage between positional suffixes and mediopassive suffixes by analogy with a reconstructed diachronic development in Q’eqchi’. However, it is still an argument with only the force of analogy and does not rule out other possible scenarios.

will continue first with other verb roots that take the $-VV_{ly}$ suffix in the Classic period, some of which display even stronger transitive semantic tendencies.

3.3.2.6 Transitive Root: *jatz'* > *jatz'aay*

Figure 124 shows an example of the verb root *jatz'* derived as a mediopassive *jatz'aay*. *Jatz'* “to hit” is the prototypical verb often used for examples of root transitive inflection in all the languages closely related to that of the Classic texts. Kaufman (2003:920) reconstructs **jatz'* for the “lowland” languages in the Yukatekan, Tzeltalan and Ch’olan families. It is attested as a transitive root in all the Ch’olan languages, for example as *jatz'i* in Ch’orti’ (Pérez Martinez et al. 1996:79), *jatz'a* in Ch’olti’ (Morán 1935c:4), *jatz'ä* in Ch’ol (Warkentin and Scott 1980:60) and *jätz'e* in Chontal (Keller and Luciano G. 1997:130). It is also attested in the Yukatekan languages as a transitive verb. All of this evidence points clearly to *jatz'aay* as a mediopassive form of the transitive root *jatz'*.

What is even more important for following the history of the $-VV_{ly}$ suffix in the Ch’olan languages is that the form *jatz'aay* is not attested in either Ch’olti’ or Ch’orti’. Instead, both languages use the mediopassive suffix *-pa* to form it instead. This means that in the Eastern Ch’olan languages this verb root did not develop into, or get reanalyzed

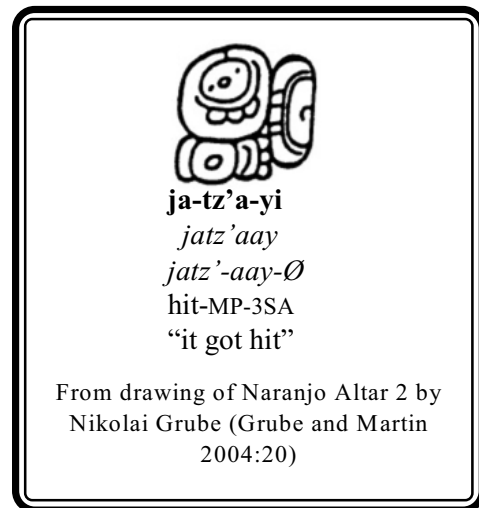


Figure 124. The verb *jatz* derived as a mediopassive in Classic Ch’olan

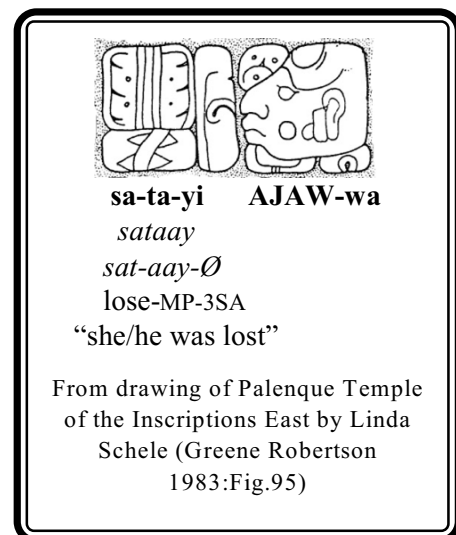


Figure 125. The verb *sat* derived as a mediopassive Classic Ch’olan

as, an intransitive. Because it did not get reanalyzed and because of its basic semantic value, one would expect that its meaning with a mediopassive suffix in the Classic Period would tend to be closer to “get hit, beat.” That is indeed the meaning of the same verb when derived with the later mediopassive derivational suffix in Ch’orti’ and, as transcribed by Stross (1990) for Ch’olti’: “*hatz’ pael* ‘(iv) be beat, whipped, hung’.” Because a different mediopassive suffix is needed in the colonial and modern languages, the most likely conclusion is that the meaning and use of the verb root stayed the same. What changed, based upon this evidence, is the meaning and function of the $-V_{LY}$ suffix in both Ch’olti’ and Ch’orti’.

3.3.2.7 Transitive Root: *sat* > *sataay*

Figure 125 shows an example of the mediopassive form *sataay* in Classic Ch’olan. The verb root *sat* is present in many Mayan languages as a transitive verb. Kaufman (2003:159) reconstructs it as **saty* in Proto-Mayan. Chontal attests several meanings for *säte*’ as a transitive verb including “perder, gastar, equivocarse, hacer perder,” “lose, waste, be wrong, make lose” (cf. Keller and Luciano G. 1997:212-13). In Acalan Chontal, it is used as a transitive verb although it is incorrectly listed by Smailus (1975:166) as intransitive.¹¹⁷ In Ch’ol *sät* is also transitive and has the meaning “lose something” (Hopkins and Josserand 1988g:s2.).¹¹⁸

The most interesting data for the present analysis of $-VV_{LY}$ forms of the verb in the Classic period are those from Ch’olti’ and Ch’orti’. Morán clearly lists the verb as *sata*, the form that reflects the vowel harmonic status marker of root transitive verbs. This conclusion is bolstered by the form *satpael* which is the incompletive form of the

¹¹⁷*cheix me laçati ciçin yebel tali tuypuçikal uçati yebel ukal ubakat uçati.* (Paxbolon et al. 1614:165.24-5) “And so they got rid of the idols, some got rid of them because they arrived at it in their hearts and some got rid of them because of their fear.” Especially in the last two occurrences, the form is clearly transitive, using the third person ergative pronoun, and the meaning is the same as one of Keller’s “hacer perder.”

¹¹⁸The form *sajtel* is listed by Aulie and Aulie (1997:104) as an intransitive verb meaning “perderse” “to be or get lost” in Tila. However, Hopkins and Josserand (1988g:s4.) analyze it as a passive form of *sät*.

mediopassive derived by /p/ from transitives. Finally, the Ch'orti' data reflect the same situation. Wisdom (1950:630) gives the main form as the transitive *sati* “lose, lose sight of” and Pérez Martinez et al. (1996:184) list the mediopassive form in the example *satpa u't* “equivocar, desaparecer” (“to be wrong, to disappear”). Since even the two Eastern Ch'olan languages still show *sat* being used as a CVC transitive, the form *sataay* in the Classic Period inscriptions is the mediopassive form of a transitive verb and not a CVC intransitive form. Since the *-Vy* form in Ch'orti' is no longer a mediopassive form, *sat* must be derived as mediopassive in a different way, in this case, with *-pa*. This is further evidence that the meaning and function of *-Vy* had changed in Ch'olti' and Ch'orti' since Classic times.

3.3.2.8 Transitive Root: *jub'* > *jub'uuy*

Figure 126 shows three examples of mediopassive forms *jub'uuy* in Classic Ch'olan. Arriving at the correct semantic and etymological equivalents of the Classic Period verb form *jub'uuy* is not a simple or straightforward matter. The first problem is caused by its possible relationship to two or three different word roots and possibly to different forms of the same word root: *job'*, *jub'*, and *jup* (or *jup'*). Bricker et al.'s (1998:107,113,116) Hocabá Yucatek dictionary includes entries related to all three of these: *hob'* as a transitive verb meaning “destroy, disturb, disarrange;” *hub'* as a transitive verb meaning “disturb, disarrange, loosen;” and *hup* as a transitive verb meaning “insert, encircle.” The entries for Colonial Yucatek in Bolles (2001) and Barrera Vasquez et al (1980) are similar but seem to lessen even more the distinction between the possible meanings of *jub'* and *job'*. Bolles (2001:1777) defines *hub'* as “to take apart, to throw down, to throw into disorder.” Both Bolles (2001) and Barrera Vasquez et al. (1980) often include in their definitions of *hub'* (*jub'*) the Spanish word “desbaratar” which has a range of meanings covering “destroy, spoil, waste, ruin, squander, rout, throw into confusion.” Barrera Vasquez et al. (1980:238) also include “derribar paredes” (“destroy

walls”) and “demoler” (“demolish”). Both sources also attest the verb *jub*’ which Bolles defines in this way “to insert, to stick an object into something in a sliding action.”

Another factor to keep in mind is the different contexts in which the word *jub*’*uuy* is used in the inscriptions. Figure 126 shows three of them. In Figure 126a the subject of the action is a person from a particular place name, a probable enemy in war. Here *jub*’*uuy* likely means “was routed” or “taken down.” In Figure 126b the subject is *utok*’ *upakal* “his/her/their flint and shield” which is either a kenning for war prowess or an actual reference to the spears and shields of their warrior enemies.¹¹⁹ In either case, their being “destroyed, wasted, or thrown down” fits very well.

Only in the third case, shown in Figure 126c, does that meaning not seem to fit very well. The subject of the action is not an enemy or the enemies’ weapons and shields, but rather a member of the royal family and a later ruler. Although it has been translated as “brought down” or “come down” in this context, there is also

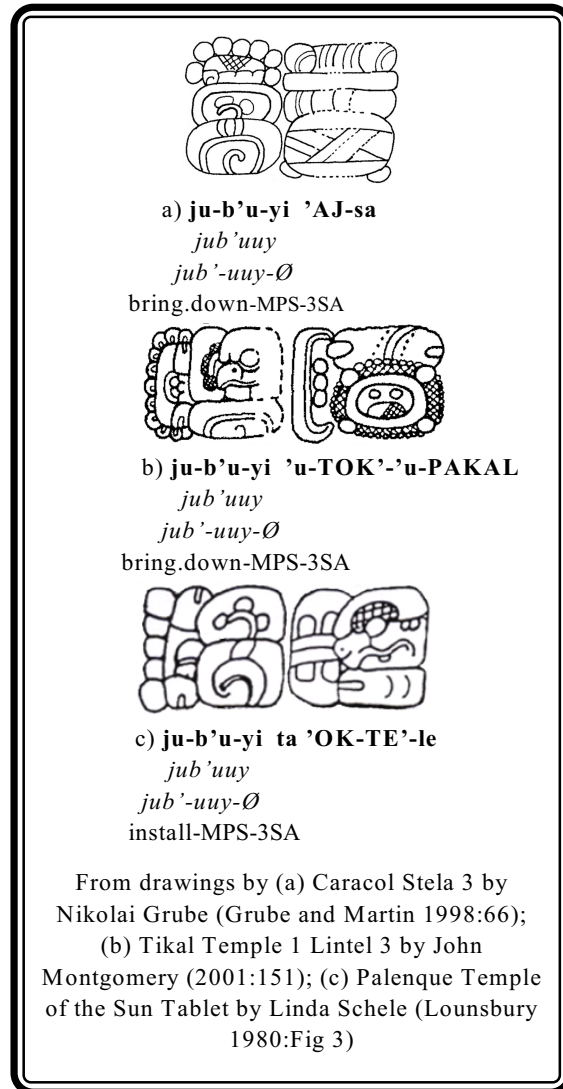


Figure 126. The verb *jub*’ derived as a mediopassive Classic Ch’olan

¹¹⁹Note that often in this context both *tok*’ and *pakal* are preceded by the 3rd singular ergative dependent pronoun written before each noun. At other times, as here, the 3rd singular pronoun is written large enough to cover the width or height of both nouns. This is likely a shorthand or stylish way to write *utok*’ *upakal* and is not meant to be read **utok pakal*. Also, it is usually followed by the name of the of the flint and shield’s possessor as it also is here although not included in the figure.

another possibility. It may instead be related to *jup*’ “insert” and refer to installation in office. The evidence from the Ch’olan languages reinforces the possibility that the three words *job*’, *jub*’, and *jup*’ (or *jup*) may all be related to the verb root or roots written as *jub*’ during the Classic Period.

Chontal has the entry *hobo(n)* (*job*’*o(n)*) as a transitive verb meaning “to dismantle” and *hu?be(n)* (*ju*’*b*’*e(n)*) as a transitive verb for “to put something in” (Knowles 1988:424). Also in Chontal, Keller and Luciano G. (1997:137) have “desbaratar, remover, alborotar” for *jobän* (*job*’*än*) and “desbaratar, desenrollar” for *jobe*’ (*job*’*e*’) thereby covering all the basic meanings in evidence for *job*’ and *jub*’ in Colonial and Modern Yukatek. Keller and Luciano G. (1997:144) also include *jup*’*e*’ as a transitive verb meaning “meter, introducir.”

In Ch’olti (Morán 1935c:23), *hobo* (*job*’*o*) is attested with the meaning “deshacer,” “to break up, dismantle.” Emphasizing the transitive character of its root, a derivational suffix is needed to derive an intransitive from it. Even more interesting for the current discussion, it is the mediopassive suffix *-tz’a* that is used in Ch’olti’ for this purpose. The result is *hobtzael* (*job*’*tzael*). *Job*’ does not occur suffixed by *-V_{LY}* in Ch’olti’. This provides further supporting evidence that the suffix *-V_{LY}* no longer was no longer used as a mediopassive suffix in Ch’olti’.

Ch’orti’ data does not provide evidence for the verb *jub*’ meaning “destroy or throw down” but does have *job*’*i* as a transitive verb meaning “to place inside” (Wisdom 1950:469) or “cubrir, tapar, hueco” (Pérez Martinez et al. 1996:85). This is the same meaning Colonial Yukatek attests for *jub*’ as just mentioned above. Since the context in which *jub*’*uuy* occurs at Palenque involves its own rulers and since *jub*’*uuy* is not otherwise used there to refer to battles or wars, the meaning could well be “to get installed in office.”

At any rate, what is most important for the present purposes is that all of these possible reflexes of *jub*’*uy* in the Classic Period are transitive verbs. One exception is Ch’ol which provides evidence for an intransitive verb *jub*’*el* meaning “to go down,”

“bajarse.” (Hopkins and Josserand 1988f:j8 and Aulie and Aulie 1998:58). Another is Chontal which, besides its various transitive forms, also has *job’e* as an intransitive verb meaning “alborotarse,” (Keller and Luciano G. 1997:137), “get stirred up, get excited” which is a reflexive in Spanish and which equates to a type of mediopassive. The English equivalent I have provided here uses “get . . .” since that fits the Spanish mediopassive-reflexive form and is one way to express a mediopassive-like equivalent in English. It should also be noted, that neither Ch’ol nor Chontal always adequately distinguishes between mediopassive stems and intransitive verb roots. So, despite some possible evidence to the contrary, the scales still tip clearly toward *jub’* and its reflexes and variant forms representing a root transitive verb root in the related Colonial and Modern languages. As with the other examples examined here, it is part of a semantic class of verbs generally indicating motion or change of state.

3.3.2.9 Transitive Root: *jom* > *jomooy*

The verb *jom* in mediopassive form is shown in Figure 127. The verb *jom* is another for which there is more than one possible lexical source. In Colonial Yukatek, it can mean “to push into an abyss” with the transitive forms *homah* and *home* provided by Bolles (2001:1746). It can also mean “derribar edificios, cerros” (“destroy buildings, rocks”). This second meaning is much the same as for the verb *hob’* in Yukatek and is likely just an allophone or differently pronounced version of the same word. In all of the Mayan languages dealt with in detail in this study, /b/

and /m/ often serve as allophones of each other, reflected either dialectally or in sound changes that occur over time. Important for the present purposes is that, in either case, it is a transitive verb requiring a derivational suffix to arrive at the intransitive meaning “to

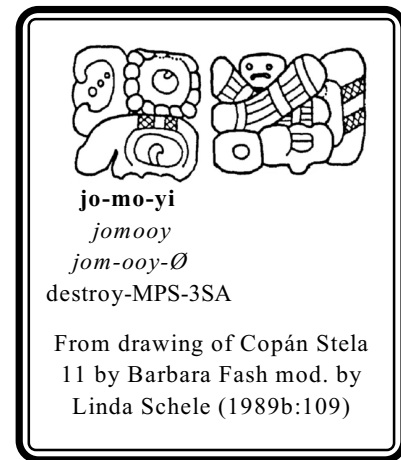


Figure 127. The verb *jom* derived as a mediopassive Classic Ch’olan

fall into an abyss.” Bricker et al. (1998:110) also classify it as a transitive verb in Modern Yukatek with the meaning “remove bottom.”

There are, however, exceptions to the interpretation of *jom* as a CVC transitive verb root. In Chontal (Knowles 1988:423), *hom* is an intransitive verb with a similar meaning, “to sink, fall in.” However, the equivalent Spanish meanings of “hundirse, sumirse” provided by Keller and Luciano G. (1997:139) hint at a possible underlying or earlier mediopassive origin. If so, it would also be a transitive root in Chontal.

Although Furbee-Losee (1976:352) in her lexicon lists *hom*-(*Vw*) as a transitive verb meaning “to ruin, to destroy, to wreck” in Tojolab’al, Lenkersdorf (1979:154) includes both an underived transitive form –*jomo* “destruir, devorar, batir, corromper, atarantar, confundir, contradecirse” (“destroy, devour, beat, spoil, stun, confound, contradict”) – and an intransitive form –*jomi* “descomponerse, degenerar, atarantarse, arruinarse” (“decompose, degenerate, be dumbfounded, go to ruin”) The Spanish meanings in “-se,” however, suggest that the intransitive form may ultimately be based upon a mediopassive form.

The verb *jom* is rare in the inscriptions and, as already noted, may even simply represent a dialectal variant of the verb root *hub*’/*hob*’. Perhaps that is why its occurrence in the Classic texts is so rare. Because Chontal has not adequately preserved a clear formal distinction between mediopassive and root intransitive forms, the appearance of an apparent *jom* root intransitive in that language should not be taken as adequate evidence that it is indeed an intransitive root. One must look to sister languages to help confirm or deny that status. In this case, the semantic qualities of this word also point to its likely historical origin as a mediopassive. If so, its root must be transitive.

3.3.2.10 Transitive Root: *wol* > *wolooy*

Figure 128 illustrates *wolooy* as the mediopassive form of *wol* in the Classic Period texts. *Wol* occurs as a root transitive verb in Yukatek, Tzeltal, and Tzotzil. In general it means “to make round” and “to form a ball.” For Modern Yukatek, Bricker et

al. (1998:307) list it as both a root transitive verb meaning “form a ball, round” as in *wol e k’eyemo* “form that dough in balls;” and as a positional root verb meaning “ball up, bulge.” Colonial Tzotzil (Laughlin 1988:131) includes a few other connotations for *vol* such as “grapple, knead (dough, clay for pots), wrap.” Although the picture accompanying the text from the vase in Figure 128 is not included here, it shows a person actually grappling with a snake.

Among the Ch’olan languages, Chontal explicitly attests *wol* as a transitive verb in the variations *wol* and *gol* “to make a ball.” Ch’olti’ (Morán 1935c:57) only attests this word as the adjective *volol* “redondo” (“round”) and as a numeral classifier *vol*. Pérez Martinez et al. (1996:64) attest *ugori* as a transitive verb meaning “bolear” (“to make a ball”), “revolcar” (“knock down”), and *empuñar* (“seize”) for Ch’orti’. Wisdom also (1950:601) records it for Ch’orti’ as *kori* “shape in the hands, shape anything into balls or pellets.” There are no examples of *wol* in Ch’olti’ or *gor/kor* in Ch’orti’ as an intransitive verb with a *-V_{ly}* suffix.

Almost all the available evidence then, points toward *wolooy* being a mediopassive rather than a root intransitive form in Classic Ch’olan times. As is the case with other root transitives, the continued interpretation of *wol* as a transitive root in Ch’orti’ prevents its use with the reinterpreted *-V_{ly}* suffix.

3.3.2.11 Transitive Root: *koj* > *kojooy*

There is little or no direct evidence for a verb root *koj* in the Ch’olan languages. If one moves back one generation in the family line, evidence for *koj* comes from Tzeltal. However, this evidence from Tzeltal takes the form of an intransitive verb *kojel* (Slocum

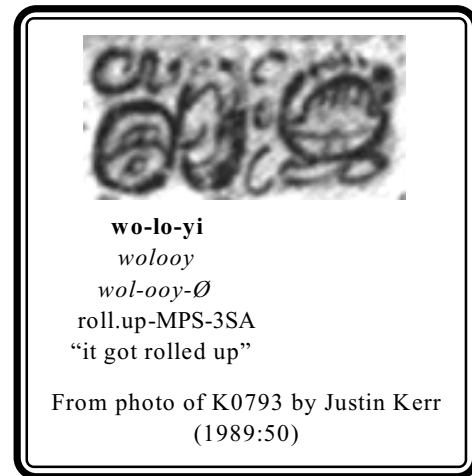


Figure 128. The verb *wol* derived as a mediopassive in Classic Ch’olan

et al. 1999:17; cf. also Pineda 1986:364). A neighboring language, Tojolab'al also points toward an intransitive verb by providing *ko'* meaning "to go down, come down, lower, descend" (Furbee-Losee 1976:355). The meaning provided by Lenkersdorf (1979:180-181) for Tojolab'al *ko'i* "bajar, bajarse," is also intransitive but "bajarse" ("descend") also hints at a possible mediopassive connotation.

Only when one goes back to the Colonial Tzeltal of Domingo de Ara (1986:275), does one find the related transitive root that is required to attest *kojooy* as a mediopassive in the Greater Tzeltalan family. There one finds *cogh* (*koj*) listed as a transitive verb meaning "quebrar una cosa con otra, como una piedra con otra" "to break/crush one thing with another, as a rock with another." Even more apropos is *coghcogh* (*kojkoj*) "hit, wound."

Why this transitive verb is related to a mediopassive *kojooy* meaning "go down, descend" becomes clearer if we broaden our view to include a few other Mayan languages, among them Yukatekan and Greater K'iche'an. Colonial Yukatek (Bolles 2001:878) attests a transitive verb *coh* "to hit, to strike with a hammer" which matches closely de Ara's entries. For modern Hocabá Yukatek, Bricker et al. (1998:131) have *koh* "beat, hit, ram, tamp down." This meaning is similar to that provided by Hofling and Tesucún (1997:356) for Itzaj *kojik* of "tamp down, pack." In both cases, it is easy to see how a mediopassive derived from "tamp down" would mean "go down, descend."

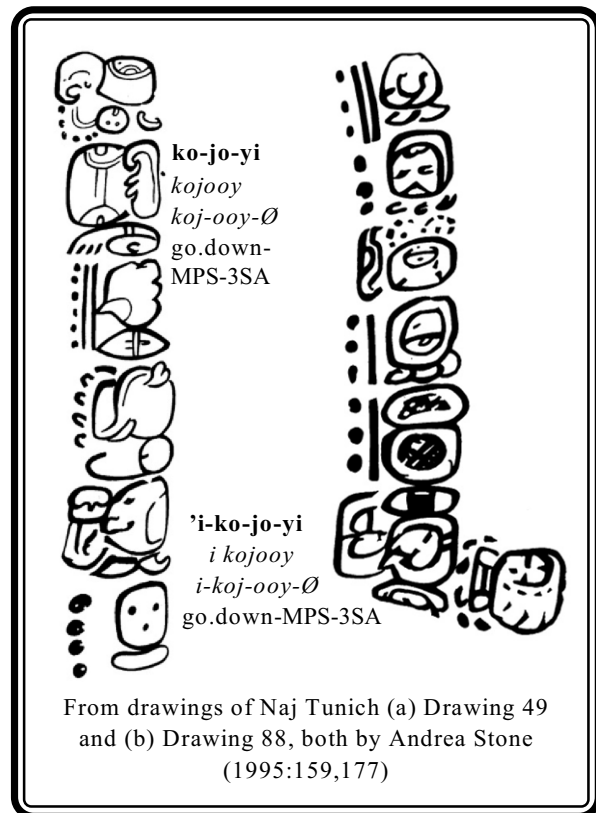


Figure 129. The verb *koj* derived as a mediopassive in Classic Ch'olan

There are two drawings in the Naj Tunich Cave that provide support for a likely meaning of “go down, come down, descend.” The Drawing 49 passage (Figure 129a) can be transcribed as follows: *alay kojooy ajchik k’uh julpi ajaw chanal*. A likely translation is “This one came down, *aj chik* divine sacul *ajaw*, [from] above.” Drawing 88 (Figure 129b) uses the verb in the same sense. *13 e’w 3 winikij utom 8 ajaw 8 ik’ k’at kojooy hu-?* It was 13 days and 3 twenty-day months before it occurred 8 *Ajaw 8 Ik’ K’at* (*Ch’e’n*) and then he came down/descended [name].” If it were an intransitive verb root, *koj* could not be subject to derivation as a mediopassive. Instead, it is likely that the ancestral root of *koj* in both Tzeltal, Tojolab’al, and Classic Ch’olan is the root attested in Yukatek as “hit, tamp down” and in Greater K’iche’an as “place, put.” A mediopassive formed from this root would likely have the meaning of “go down, come down, descend, get put in, get brought down” which would fit very well in the context of coming down or getting brought down into a cave. This meaning would be brought about by deriving the transitive verb as a mediopassive using the *-VV_Ly* mediopassive suffix.

It is not known whether the root *koj* may still have been used as a transitive verb in Classic Ch’olan since it is not, at least not yet, attested as such. The evidence from Tzeltal and Tojolab’al suggests that this root may have no longer been used as an active transitive in the Southern Lowlands and may have only been used as a mediopassive intransitive during the Classic Period. That it is no longer attested as either transitive or intransitive in any of the Ch’olan languages may account for its being infrequent appearance in Classic Ch’olan.

3.3.2.12 Transitive or Intransitive Root: *lok’* > *lok’ooy*

Of all the verbs reviewed here that take the *-VV_Ly* suffix in Classic Ch’olan, *lok’ooy* (Figure 130) probably provides the most Colonial and Modern evidence for classification as a root intransitive. Kaufman (2002:1318) reconstructs **loq’* as a Western and Lowland Mayan intransitive verb meaning “to leave” (“salir”). It is an intransitive verb with that meaning in Ch’olti’ *loquel* (Morán 1935c:60) and Ch’orti’

lok'oy (Pérez Martinez et al. 1996:129; cf. Wisdom 1950:516 (*lok'oih*)).

Evidence that it is regarded as a root intransitive comes especially from the use of a causative derivational suffix to form a transitive, *lok'sen* and *lok'es* for Ch'olti' and Ch'orti' respectively. This is also true of Colonial Tzotzil (Laughlin 1988:247). In Yukatek, where the root vowel has changed to /u/, it is an intransitive verb *luk'* (Bricker et al. 1998:174).

Ch'ol (Aulie and Aulie 1998:66) also has *lok'* as an intransitive verb meaning “salir” (“leave, go out”) which also forms a transitive by adding a causal suffix as in *lok'san*. However, **very important** is the **evidence of it as a root transitive** in the form *lok'* “sacar” “take out, remove, bring out” listed in Aulie and Aulie (1998:66).¹²⁰ It is also attested as root transitive *lok'o* by Hopkins and Josserand (1988g:17) with the meaning “take something out.” This is important because it represents the attestation of this verb as a transitive root in a descendant of Classic Ch'olan despite its legitimate reconstruction as an intransitive root in Western and Lowland Mayan (cf. Kaufman 2003:1318).

There is also evidence of its usage as a root transitive in both Colonial and Modern Tzotzil. In Colonial Tzotzil (Laughlin 1988:247), it is attested as an intransitive verb *lok'* meaning “absent one's self, be divided into parts, be reduced to, bud, depart, flow out without bubbles, go out, leave, sprout.” But in the same Colonial source, it is also attested as a root transitive *lok'* meaning “fill another's role, free captive or prisoner,

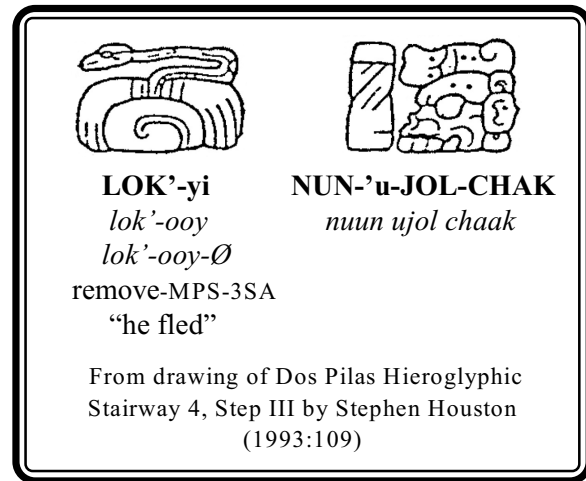


Figure 130. The verb *lok'* derived as a mediopassive in Classic Ch'olan

¹²⁰The example given is: *Yomix a loc' jini we'eläl ya' ti' p'ejtäl*. “Ya debes sacar la comida de la olla.” (“You should take out your meal there from the pot.”)

look like (one's father or mother), obligate self to or for another, pay one's debts in full, stand as guarantor." This is true despite the existence of a causative derived from the intransitive root as *lok'es* "deprive of office, free (captive or prisoner), remove, take out, throw out" (Laughlin 1988:248). This seeming discrepancy is not likely due to an error on the part of the native Spanish-speaking compilers of the dictionary. Laughlin had earlier found the same situation still present in Modern Tzotzil of San Lorenzo although the meanings of the two roots had moved slightly further apart by then. As a transitive root, *lok'* is used in the sense of "cut off, remove /clothes/, rent" and as a root intransitive *lok'* with the meaning "exit, go out, come out, issue forth, run (dye), end (term of office), fall off (pants, shirt), rise (sun, moon), be able to spare" (Laughlin 1975:217).

In sum, *lok'* provides another good example of a verb with a meaning involving motion or change of state which appears as a mediopassive in Classic Ch'olan. As of yet, there is no further evidence of its being used as either a root or derived transitive verb in the Classic inscriptions. Its presence in Yukatek, Q'anjob'al, Tzeltalan, and Ch'olan, but not elsewhere, may indicate a possible Classic Ch'olan source for the form in the non-Ch'olan languages. If that is so, that might also explain its attestation as an intransitive in those other languages since the mediopassive *lok'ooy* would have been connected with an intransitive meaning while the suffix itself might have been discarded or disregarded in those languages. Going back even further, the source for the verb in this meaning could well have been Greater Tzeltalan. Among the factors favoring this historical source is the presence of the root transitive form *lok'* in both Tzotzil and Ch'ol. Although one might consider attributing this simply to possible later borrowing between these two languages, the other factors involved actually point toward *lok'* having its origin in a root transitive. As a root transitive in Classic Ch'olan, it would then have been eligible for derivation as a mediopassive. The use of *lok'* as a transitive verb would have eventually been overshadowed by its use as a mediopassive. Also, the meaning and usage of the two forms would have eventually diverged, requiring its derivation as a transitive using a

causative suffix. This latter form using a causative suffix is not attested in the Classic-Period texts at all. In Tzotzil and Ch'ol, the root transitive form would have continued in use, either side by side or at least in some dialects, with the causative. In Eastern Ch'olan, only the shape of the $-V_{ly}$ mediopassive form survived. However, as will be discussed next, this mediopassive suffix itself had undergone a reinterpretation eventually making it synchronically incorrect to refer to it as a derivational mediopassive suffix.

3.3.2.13 Transitive or Intransitive Root: $t'ab' > t'ab'aay$

This verb root may be either transitive or intransitive depending upon its etymological source and meaning. By virtue of its use in the Primary Standard Sequence (PSS) on ceramics, $t'ab'aay$ is one of the most frequently occurring $-VV_{ly}$ verbs in the Classic Period inscriptions.¹²¹ Figure 131a illustrates its use on a polychrome vase. This root was deciphered as $t'ab'$ by Elizabeth

Wagner (cf. Schele and Matthews 1998:338; Schele et al. 1994:3).¹²² Unfortunately, its meaning in the context in which it occurs most often is still disputed. Because of this, its value for the present analysis is limited.

In Yukatekan, the most common verbal form of $t'ab$, is as a transitive verb, for example, in Itzaj $t'äb'$ “to light” (Hofling and Tesucún 1997:616) and $thab$ ($t'ab'$) “to light a fire” in Colonial Yukatek (Bolles 2001:3449; cf. Barrera Vasquez 1980:830).

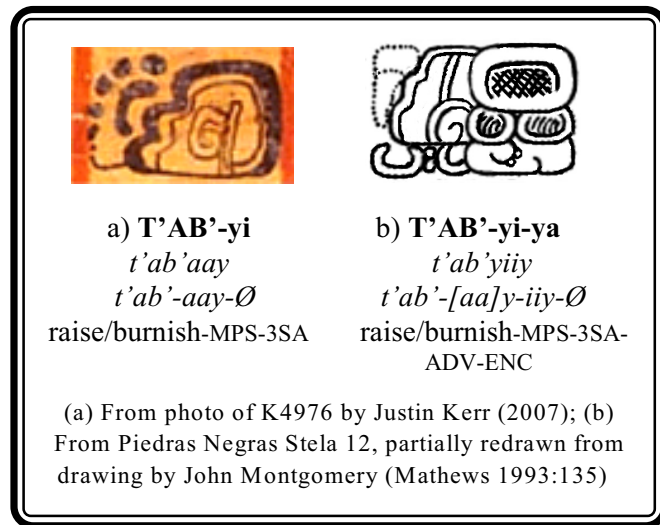


Figure 131. Verb tab' derived as a mediopassive in Classic Ch'olan

¹²¹Note that there may also be an issue as to whether the logogram used to write this verb really has the value $t'ab'$.

¹²²I am not sure if this decipherment was proposed earlier or independently by anyone else.

Since Maya ceramics are fired, this meaning seems somewhat plausible if one expands it slightly to include “to fire” rather than just “to light a fire.” However, *t’ab’aay* also occurs on carved stone monuments, for example on Piedras Negras Stela 12 as shown in Figure 131b, which are made of limestone and would not be fired.

Another possibility comes from the meaning of *t’ab’* in the Tzeltalan languages. For example, in Colonial Tzotzil (Laughlin 1988:322) *t’ab’* is a transitive verb meaning “anoint, burnish, polish.” This seems to make good sense in light of its occurrence especially on many of the polychrome pottery articles since they do indeed need to be burnished (“polished”) before being painted (cf. Shepard 1980:65ff.). In Modern Tzotzil (Laughlin 1973:352-3), it refers to things being wet and smoothed, such as “hair” or “ground on which flailed corn is to fall” or to a “complete broad swatch” cleared by “hoeing, weeding, clearing” or smoothing the “wall of a mud and wattle house. It seems that this meaning would also be broad enough to cover limestone carvings as well which may be burnished, smoothed, and even wet to accomplish that before being carved.

However, many have settled on a different meaning, at least provisionally. This meaning occurs mainly in the Ch’olan languages. In Ch’orti’ (Wisdom 1950:682), *t’ab’ay* is an intransitive verb meaning “ascend, climb, go up.” The Ch’orti’ data alone, however, is not enough to determine whether the root was historically transitive or intransitive because Ch’orti’ has reinterpreted *-V_{LY}* as a thematic suffix for intransitive verbs. It is already an intransitive root in Ch’olti’ because Morán’s dictionary includes the causative form *tabse* “subir” (“lift, raise”), using a derivational suffix which cannot be added to a transitive verb stem. More evidence of its intransitivity comes from Chontal (Knowles 1988:469) which has *t’äb’* as an intransitive verb meaning “to go up, rise.” Again, suffixes would be needed to derive a transitive verb from it, for example, *täbsen* “to raise, lift, put up.”

The problem with this interpretation lies in fathoming its meaning in the PSS texts in which it occurs. Translating this portion of the text in Figure 131a as “Then/This one rose/went up . . .” followed by “it was painted/written on, it is the drinking vessel of . . .”

does not seem to make too much sense. However, some have speculated that it refers to a particular type of dedication ceremony. The alternative, “This one got burnished/smoothed, it was painted/written on, it is the drinking vessel/cup of . . .” does fit well since the first two events refer to steps in its creation. This difference is also one that is important for grammatical analysis, since the two interpretations differentiate *t’ab’aay* as either a root intransitive verb with a *-VV_{ly}* thematic suffix (or status marker) or a mediopassive verb derived from a root transitive. . Although it is possible that *t’ab’* as a root transitive meaning “bring or take up” may have existed historically, I have not yet been able to find evidence for it.

It is often suggested that the value of the logogram shown in Figure 132, the so-called “God N” verb, is the same as that of the **T’AB’** logogram shown in Figure 131. Both occur at times with a likeness of a footprint in front which leads some epigraphers to suggest that they are equivalent.¹²³ However, all that is really clear is that they substitute for each other in the same position as verbs occurring near the beginning of the PSS. The God-N verb is used elsewhere in what seem to be dedication contexts, which leads some to translate or paraphrase both versions of *t’ab’aay* as “got dedicated.” Perhaps this plays upon the one of the Tzotzil meanings of *t’ab’* as a transitive verb meaning “anoint” when referring to Catholic anointing ceremonies. If so, its source may simply be the action of wetting something in order to smoothen or burnish it rather than upon a particular action otherwise related to dedication.

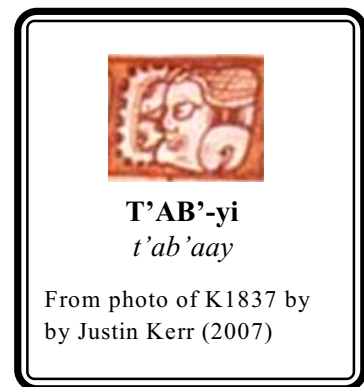


Figure 132. The “God N” verb

¹²³In this particular example, similarity of the preceding sign is not as easily identifiable as a footprint.

3.3.2.14 Bound Transitive or Adjective/Intransitive Root: *naj* > *najaay*

The data from the languages that have been used here as sources for the meanings of this set of verb forms is not immediately clear. The root *naj* causes additional difficulty because of its extreme rarity in the Classic texts. The most widely known example of *najaay*, shown in Figure 133, occurs out of context because it is part of a longer text formed from stucco-like plaster which fell to the ground over time. In an attempt at a reconstruction of the text, Ringle (1996) does not suggest a placement for this particular glyph block.

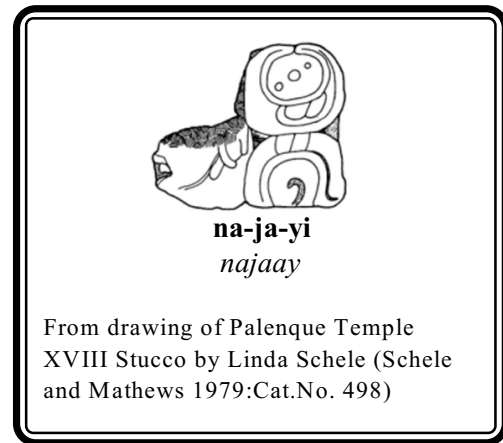


Figure 133. The verb *naj* derived as a mediopassive in Classic Ch'olan

A proposed interpretation (Stuart et al. 1999a:31) of *najaay* as “to fill” actually relies mainly upon the adjectival root *noj* which is reconstructed as **nohj* “full” for Proto-Mayan (Kaufman 2003:971). Yukatek sources have *ná'ah* (Bricker et al. 1998:193) and *naaj* (Bolles 2001:2577) as adjectives meaning “full, satiated” and “harto, relleno,” respectively. Further, it is attested as the adjective *noj* instead of *naj* in Tzotzil (Laughlin 1988:273, 1975:256) and Tzeltal (e.g. Slocum et al. 1999:85). In both Tzotzil and Bachajón Tzeltal, *noj* is also analyzed as an intransitive verb. It is listed by Laughlin (1988:273) as an intransitive verb in Colonial Tzotzil, but the Spanish original indicates a mediopassive (“ahitarse,” “empalagarse,” “h[a]rtarse,” “henchirse,” etc.).

If *noj* is truly a mediopassive, it would have to have been derived from a transitive root, although none is listed by Laughlin. A theoretical consideration might be that this usage of *noj* represents an adjective used in stative sentences, making it seem to be an intransitive verb. That would make *noj* an adjectival root instead. However the Spanish author of the Santo Domingo Zinacantán Dictionary repeatedly lists it in different contexts with absolutive pronominal prefixes. These never occur on adjectives in stative

sentences. It is not likely that the compiler would have consistently made this error considering all the different forms and contexts presented. So these examples must indeed represent an intransitive verb, and if the translations are literally accurate, it would represent an intransitive verb with a mediopassive meaning, reflected in the Spanish mediopassive or reflexive translations.

Ch'orti' (Wisdom 1950:543) provides evidence of an adjectival root *noh* meaning "large, big." Also attested are intransitive and transitive verbs formed with that root. The form *nohran* represents an inchoative or versive meaning, according to Wisdom, "be large or fat, increase, fatten up" or, in other words, "to become large." But in order to arrive at a transitive verb, the causative "es" suffix has to be added to the inchoative (versive) stem *nohr-*. As such, Ch'orti' does not add to the likelihood of this root being the source of the Classic Ch'olan mediopassive in *-VV₁y*.

Ch'ol and Chontal both attest *naj* (Knowles 1988:442) as an adjective meaning "full, satisfied." Ch'ol (Aulie and Aulie 1996:79) actually has *ñaj'an* as a derived intransitive verb meaning "llenarse" ("to fill oneself/itself, be full"). A further caution should be added that in all these sources, the connotation of "fill" appears to have more to do with being satiated or getting larger than with filling something in general.

Another possibility for the source of *najaay* may be *naj₂* an intransitive verb meaning "to forget." It is included in Kaufman and Norman's (1984:126) Proto-Ch'olan reconstructions. They also reconstruct it as an intransitive verb for Proto-Mayan. It is attested as "to forget" in all the Ch'olan languages except Acalan Chontal. In Ch'ol, it appears in the incompletive as *ñajäyel* (Aulie and Aulie 1998:79) and in Chontal as a derived transitive *najyan* "to forget something" (Knowles 1988:442). In Ch'olti' (Morán 1935c:48) and Ch'orti' (Wisdom 1950:536) it is attested as *najpah*, a mediopassive, possibly derived from a derived transitive *naja*. Although the character of the root *naj* in this context is not clear, that a mediopassive *najpa(j)* exists in both Ch'olti' and Ch'orti' seems to be good evidence for the existence of a transitive root in *naj*, at least historically speaking.

In Ch'orti', a causative suffix is used to derive a transitive verb *najpes* from *najpa* (Pérez Martinez et al 1996:149). If *naj* were already a transitive verb meaning "to forget," the causative *-es* deriving a transitive verb with the same meaning would seem to be superfluous. However, a causative derived from a mediopassive may indeed have a meaning different from an original root transitive and that could explain the use of a transitive derived from a mediopassive stem. The root *naj* does not seem attested independently as a transitive root in Ch'orti'. Wichmann (1999:69) analyzes it as a bound root. This would seem to conflict with Kaufman and Norman's reconstruction of *naj* as an intransitive verb since a mediopassive cannot be derived from an intransitive verb. A possible resolution is to reconstruct a transitive verb **naj* meaning "to remember (something)." It would then have been derived as a mediopassive with the suffix *pa/paj*. The transitive form would have fallen into disuse already by Classic Ch'olan times but the mediopassive form would have remained.

Even more speculative, but still worth considering, is the parallel form in Ch'ol *ñayäy* as in the sentence "*Tsa' ñayäyi icha'an jini junta. Se le olvidó la junta.*" (Aulie and Aulie 1998:79) "He forgot the meeting." While not a productive suffix in Ch'ol, this form may indeed represent an ossified form of the mediopassive *-V_ly* that is no longer attested in that language. Because the root itself tended to be a bound root and because the mediopassive suffix *-V_ly* was no longer used in Ch'ol, it would have simply remained as an integral whole with no need for the form to be reanalyzed or modified. This would parallel the root's usage in Ch'orti', which, although it uses the mediopassive *-pa* suffix instead, does not exist any longer as a transitive root outside that particular construction.

Since its meaning in the contexts in which it occurs in the Classic texts is not certain, it is difficult to decide which root is intended. If its meaning is indeed related to "be full, satiated," *najaay* would appear to be based upon an intransitive stem, either CVC, based upon Tzeltalan sources, or perhaps derived from an adjective *naj* or *noj* rather than being based upon a transitive verb root. That would be somewhat problematic since it would not seem to fit the character of a mediopassive suffix. If it is based upon a

root *naj* meaning “to forget” it could also be problematic because of Kaufman’s Proto-Mayan reconstruction as an intransitive root. However, the root meaning “to forget” has a much greater chance of being originally based upon a transitive root, which, by the time of Classic Ch’olan, may have already become a bound root as it seems to be later in Ch’orti’. Perhaps finding more Classic Ch’olan examples in context will help to resolve the issues of both its meaning and its transitivity.

3.3.2.15 Recap, Conclusions, and Hypotheses

Most of the verbs that occur with a *-VV_{LY}* suffix in Classic Ch’olan are clearly root transitives.¹²⁴ Of the eleven that were examined here as being among the most securely attested and identified in the Classic texts, the roots of at least seven surely represent CVC transitives. Two others demonstrate good evidence of being at least etymologically derived from CVC transitives.

The root *koj* is not attested at all in the Colonial or Modern Ch’olan, but strong evidence comes from Colonial Tzeltal for a root meaning “hit, strike” (Ara 1986:275) that could take on the meaning of “go down, descend” if derived as a mediopassive. Yukatek and Itzaj also provide support for this conclusion with *koj* as a transitive root meaning “tamp down, pack.

Although attested as intransitive in several of the Greater Tzeltalan languages, *lok’* is attested as a transitive as well as an intransitive root in both Ch’ol and Colonial Tzotzil. Thus, a case can be made that these two languages preserve an older Greater Tzeltalan analysis of this root as a transitive that also existed in Classic Ch’olan but over time has been dropped in favor of a single intransitive interpretation.

If one accepted those two as well, that would make nine of the eleven that have demonstrable transitive roots at least historically or in related languages. That would leave just two not yet accounted for. The root *t’ab’* is attested as either a transitive or

¹²⁴Some of the verbs that take a *-VV_{LY}* suffix in the Classic texts have not been included here because there is not enough agreement concerning their decipherment or identity. Using those verbs to argue for a specific interpretation of the suffix would not be productive at this time.

intransitive root depending upon the actual meaning. Since this is still in some dispute, it cannot be used as part of the argument here. Similarly, the last root *naj* is so rare that the context itself is not yet clear and so also cannot be used to support or argue against the hypothesis being presented here.

Despite the lack of enough evidence from a few examples, it is still quite clear that *-VV_{ly}* was overwhelmingly, and perhaps exclusively, used as a mediopassive suffix in Classic Ch'olan. As noted at the beginning of this section, mediopassives are linked in many languages with semantic qualities indicating a state. This particular set of verbs follows that general pattern while also including change of state or motion. It was also noted earlier that even when mediopassives are not confined to such verbs, their semantic character is still a factor in whether and how they are capable of being used as mediopassives.

Overall, the *-VV_{ly}* suffix was a mediopassive derivational suffix throughout the Classic Period. It was used mainly on transitive verbs that indicated state, change-of-state, or motion. Although it derived mediopassives from transitives in the Classic texts, it may also be true that the wide usage of the suffix over time on some of these verbs eventually had an effect upon their status as root transitives. A similar process has already been noted for some transitive verbs derived as passives in *-hC* or *-hC-aj*, most notably *uht*. It and others, such as *yahl*, show evidence of already having been reinterpreted as intransitive roots over time. As a result, they were inflected as root intransitives in the Classic Period. A similar movement eventually took place in the case of *-VV_{ly}* mediopassives as well, but it began near or after the end of the Classic Period rather than at its beginning. The comparison is not exactly parallel, however. In the case of the *-VV_{ly}* mediopassive suffix, later evidence from the Colonial and Modern Periods indicates a more complex state of affairs than for the passives.

As already noted, after the late Classic Ch'olan period, there was apparently some movement toward reanalyzing certain mediopassive verbs in *-VV_{ly}* as root intransitives. That also happened earlier with certain verbs used frequently as passives. What is

different between this mediopassive movement and that which took place with the passives, is that eventually it had an effect upon either the function or the very existence of that suffix itself depending upon the affected language area. Its effect was not limited only to certain verbs that were derived as mediopassives with that suffix. Clear evidence that this actually happened does not become available until 600 years later in Colonial Ch'olti' times.

This process culminating in the use of what was previously a suffix deriving mediopassives from transitives as a marker or thematic suffix on intransitive verbs of motion, state, or change of state intensified over time in the Eastern Ch'olan languages. Much of this movement took place sometime during the period after the collapse of the major cities in the Southern Lowlands, between approximately the beginning of the 10th century and the first part of the 16th century A.D. It is noticeable already in Colonial Ch'olti' in several ways. Based upon even the limited documentation that exists for the Ch'olti' language, one can see that several verbs have been added to the list of the traditionally root intransitive verbs taking the $-V_{ly}$ suffix. These include *cham* "to die" and *och* "to enter," both attested repeatedly as root intransitives *chami* and *ochi* with the $-i$ intransitive marker in the Classic Period, and **never** with $-VV_{ly}$. Other verbs attested with $-V_{ly}$ in Ch'olti' are *putz'*, *k'ot*, *kal*, and *wan*.¹²⁵ As already stated above, *wanay* represents a reinterpretation of the intransitive root *way* "to sleep, dream" that is not present in Ch'orti' which has instead *wayan* and *wayni*.¹²⁶ *T'ab'* is also an intransitive root in Ch'olan with the meaning "go up, rise" and should be included among the intransitive roots that take the $-V_{ly}$ suffix in Ch'olti' and Ch'orti' although its status and

¹²⁵One might add to these examples of non-CVC intransitive verbs such as *ejmay* which takes an $-ay$ suffix in Ch'olti'. It appears in Ch'orti' in two different forms as *ejmay* and *ekmay*. There is, however, no attested occurrence of $*ehmay$ in the Classic Period texts. What appears to be a syllabically spelled *e[h]mi* does occur in the Dresden Codex pages 20b and 23a and in the Paris Codex page 17b (as noted by Grube and Nahm 1990:20-21).

¹²⁶This is one of several anomalies that would be difficult to explain if Ch'olti' was a direct predecessor to Ch'orti' rather than a sister language. Once the verb *way* was reinterpreted as *wan*, it is difficult to conceive how it would have turned back again into *way* and no longer have been attested as *wan* in Ch'orti' if the two languages were indeed related as parent to child.

perhaps its decipherment in the Classic Period is not quite as certain. This is clearly evidence that in Ch'olti' the $-V_Iy$ suffix was well on its way to losing its status as a derivational mediopassive suffix and becoming a status marker or a thematic suffix for a certain group of intransitives. Clearly the roots *cham* "die" and *och* "enter" were root intransitives throughout the Classic Period and still are intransitive roots in the Ch'olan languages. That is unmistakable evidence that the $-V_Iy$ suffix was now being reinterpreted at least as an intransitive marker and probably already as a thematic suffix.

The verb *pul* "burn," to the contrary, stands as a holdout against this reinterpretation of its $-VV_Iy$ suffix, or perhaps as a fossilized member of the previous mediopassive set in $-VV_Iy$. The form *puluuy* provides an excellent trail to follow from the Classic Period through Ch'olti' and up to Modern Ch'orti'. The evidence from the Ch'olan languages except for Ch'orti' establishes it as a transitive verb. It takes a $-VV_Iy$ mediopassive or middle voice suffix in the Classic texts, an interpretation that is reinforced by the occasional explicit statement of the actor or overseer of the burning in the sentence that follows it. Such a statement of agency would be highly unlikely in connection with a root intransitive verb even if it occurred in the next sentence rather than in the same one. Just as important, as demonstrated in the forms present in Morán's *Arte* (see above Section 3.3.2.3), it is still a transitive root in Ch'olti', despite Fought's (1984:53) classification to the contrary, and so takes the regular Ch'olti' $-V_I$ transitive status marker as well. In Modern Ch'orti', the whole analysis of the root *pur* (*pul*) has changed. Instead of remaining a root transitive verb in Ch'orti', it has been reinterpreted as an intransitive with a status marker or thematic $-V_Iy$ intransitive suffix.

Although diachronic changes connected with the reinterpretation of the $-VV_Iy$ suffix seem to have brought about a change in how the verb root *pul* was viewed in Ch'orti', there are even more examples of transitive verbs that have instead retained their character as root transitives. There is evidence other than *pul* of this transitivity retention in Ch'olti' as well. Among the verb roots also appearing in the Classic texts that are still transitive in Eastern Ch'olan are *jatz'*, *sat*, *jub'*/*job'*, and *jom*. Since they are still

transitive, there is little doubt that the $-V_{ly}$ suffix used with these verbs roots in Classic Ch'olan represented mediopassive derivation and not intransitive status markers or thematic suffixes. **None** of these verbs take the $-V_{ly}$ suffix in Colonial Ch'olti' or Modern Ch'orti'. Instead, when forming mediopassives from these roots in these two languages, different suffixes must be used. Attested are $-pa$ mediopassive for *jatz'* and *sat, jatz'pa* and *satpa*; and $-tz'a$ mediopassive for *job'*, *job'tz'a* (cf. Morán 1935d and Pérez Martinez et al. 1996).

Generally, Eastern Ch'olan and especially Ch'orti' has developed a new way to treat many verbal suffixes, especially those occurring on root intransitives and transitives in the indicative or “default” mood. This is already noticeable in Colonial Ch'olti', primarily in its approach to intransitive verbs. The limited evidence reveals mainly $-V_{ly}$ suffixes for regular CVC roots, but only one in $-i$. The non-CVC roots mainly take $-Vy$ and $-i$ suffixes, with the latter only rarely displaying signs of being a status marker on certain verbs as interpreted by Kaufman and Norman (1984), and even these, except for *b'ixi* are subject to counter-evidence from other sources as already discussed above. Otherwise, the suffixes are “thematic” under Kaufman and Norman’s interpretation of that term. On root transitive verbs, the $-V_l$ status marker is the reflex of the Classic Period $-V_l'w$ status marker. In Modern Ch'orti', almost all suffixes for both transitive and intransitive roots are “thematic” within both Kaufman and Norman’s (1984) and Wichmann’s (1999) interpretation and do not mark status. Only a few intransitives other than those in $-V_{ly}$, according to Kaufman and Norman (1984) and none according to more recent sources (Pérez Martinez et al 1996; Hull 2005; Wichmann 1999) are attested without an indication or reflex of an $-i$ thematic suffix by forming the imperative in $-e'n$ or even $-ye'n$. Only those which take a $-V_{ly}$ status marker or thematic suffix take simply $-en$ as do transitive roots. A concomitant of this situation is that certain thematic suffixes, most importantly $-i$, can occur not only on both transitive and intransitive roots, but are actually more common on transitives than intransitives. On this score, there is very little

resemblance between the Ch'orti' and the Classic Ch'olan approach to verbal morphology.

Western Ch'olan, in its Ch'ol representative, while it has lost its use of the $-VV_{ly}$ mediopassive suffix altogether, has done a much better job of maintaining not only the status markers of Classic Ch'olan but also its overall approach to verbal status markers. If we leave aside the innovation represented by the incomplete aspect in Ch'ol for now, the suffixes on verbs in Ch'ol, both the intransitive $-i$ and the transitive $-V_l$, preserve remarkably precisely those of the Classic Period language. What is more, as we have already mentioned, these suffixes in Ch'ol are more accurately analyzed as status markers for root intransitives and transitives than as completive suffixes. In Ch'ol, it is mainly the auxiliaries and particles that indicate completive and other aspects, while the status markers primarily indicate intransitivity and transitivity of the roots. The incomplete suffixes, which are primarily newly recruited nominalizations, will be discussed later. The move of the $-VV_{ly}$ suffix from mediopassive derivational suffix to an intransitive status marker or thematic suffix in Eastern Ch'olan was paralleled in Western Ch'olan, but especially in Ch'ol, by the move away from a $-VV_{ly}$ mediopassive, to practically no separate mediopassive suffixes at all, and to a broad preservation of the $-i$ status marker for root intransitives. A concomitant of both the preservation of this intransitive status marker and the takeover of the intransitives by what was formerly a mediopassive suffix led instead to a total loss of the $-VV_{ly}$ suffix in Ch'ol. It probably led to the loss of that suffix in Chontal as well although its adoption of an $-i$ completive suffix from another etymological source shows that it eventually took a different path from that of Ch'ol.

4 Resultative Aspect

4.1 Recent Interpretations of Certain Lexemes with Glyphic *ji* Suffixes

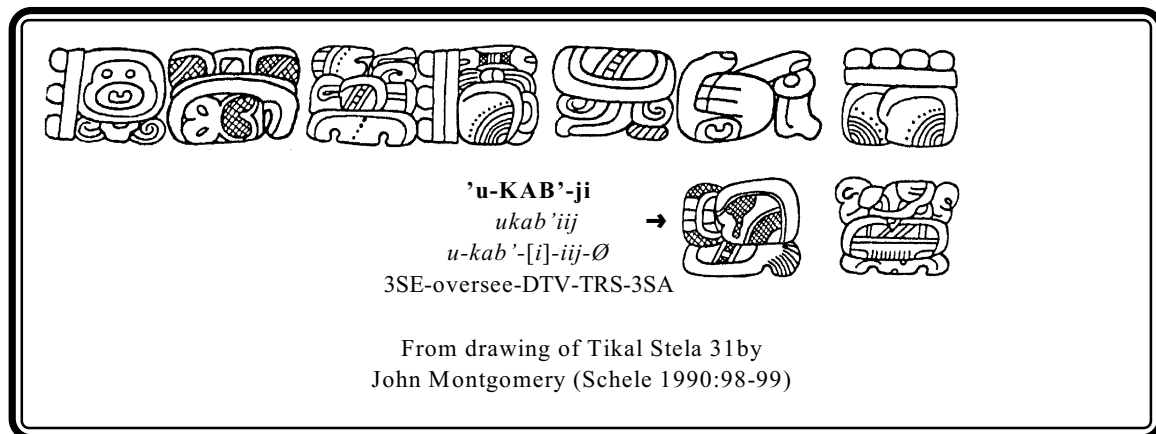


Figure 134. One of most common so-called “secondary verbs” **'u-kab'-ji**.

4.1.1 “Secondary Verbs” Sobriquet

One of the most common verbs in the inscriptions is derived from the nominal root *chab'* or *kab'*. It occurs in various forms including that shown in Figure 134. It is likely derived as a transitive verb by the suffix *-i* both in Classic Ch'olan and in Tzotzil. For Colonial Tzotzil, Laughlin (1988:184) has many entries related to this particular derived transitive verb including the main entry “*chabi*, tv. govern, guard, watch over.” For the modern Tzotzil of San Andrés, Delgaty and Ruíz Sánchez (1978:36) list “*chabiel'*” as a verbal noun meaning “cuidar” (“take care of, watch over”). The relationship of the Classic Ch'olan **'u-kab'-ji** to the well documented verb form *chab'i'* in Colonial Tzotzil has been convincingly argued by Steve Houston (cf. Grube and Martin 1998:16) fairly recently. Because this word is always written using the logogram **KAB'**, there is some difference of opinion as to whether the root is *chab'* or *kab'* in the Classic-Period texts. It will be written here as *kab'* based upon the logogram's otherwise consistent value, but this is not meant to signal a difference in opinion as to the etymology of the word or its Tzotzil reflexes.

In greater dispute recently is what the verb forms such as **'u-kab-ji** and the others in Figure 135 actually write and how they are to be analyzed. They have at times been referred to as “secondary verbs” (cf. Houston in Stuart et al. 1999b:105), alluding to their seeming dependence upon the clauses or sentences that precede them. But they are not really “secondary” in any grammatical sense and, despite some appearances to the contrary, they do indeed occur in initial position just as do most verbs in Classic Ch'olan sentences. This misapprehension concerning a supposed “secondary” status is caused by the absence of the explicit nominal object in these sentences. Instead, the dependent pronominal direct object refers to persons,

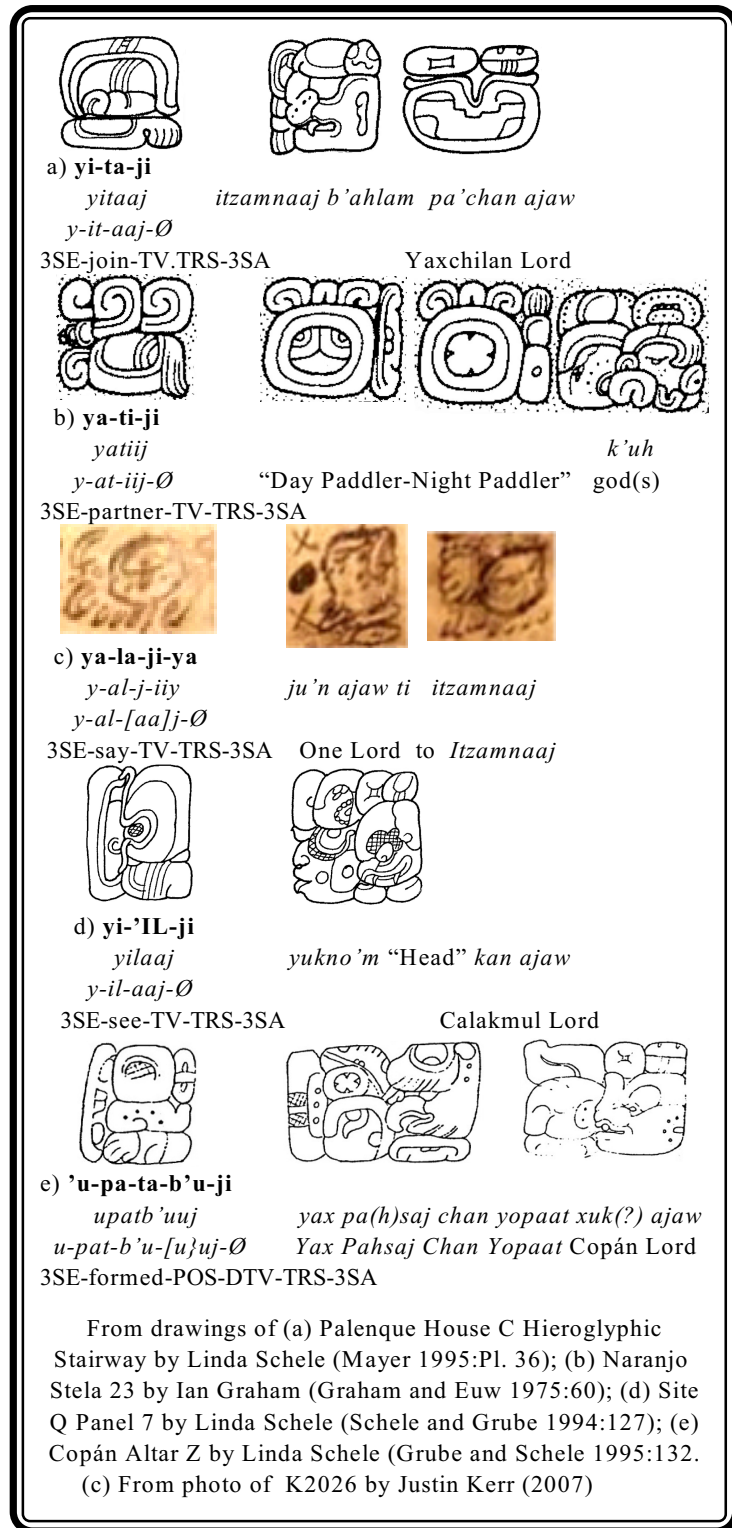


Figure 135. Other verbs written with final **ji** sign and appearing in syntactic contexts similar to **'u-kab'-ji**

things, or events in the previous sentence or sentences.

This type of deictic reference occurs in perhaps all languages, whether one is usually working with dependent and obligatory person markers, as in Classic Ch'olan, or with independent pronouns, as in most European languages. To this extent, they are no different from English or Spanish sentences that use pronouns, albeit independent pronouns, to refer to an object that is not expressed nominally in a particular sentence. This type of pronominal deictic reference will be discussed in more detail later in Sections 6.3.1 to 6.3.5. The transitive verbs, however, occur at the head of these sentences, each with a dependent pronoun prefixed. Although the ergative pronouns do physically occur first, they are not independent words, but instead join with the verb and its other affixes and clitics to form the whole integral verbal composite.

4.1.2 Misinterpretation as “Nominalized Antipassives”

Some have doubted the actual status of this group's members as transitive in these contexts. Instead of analyzing them as verbs, they have instead interpreted them as “nominalized anti-passives” (cf. Houston and Robertson in Stuart et al. 1999b:105-13 and Robertson et al. 2004:284-287). Since they contend that these forms are always preceded by ergative pronouns, and they also deny them verbal status, that would make them possessed nominals in these contexts. This misinterpretation of the grammatical class of this set of verb forms is abetted by the nature of the 3rd person singular absolutive (Set B) pronoun. Since the object of these verbs is usually a person, event, place, or thing, in a previous sentence, it is the 3rd person singular absolutive pronoun that points to it. Because this particular pronoun is the default or unmarked dependent pronoun among the complete set of pronouns, its null character unfortunately leaves the door open for varying interpretations of the character of the root word itself.

4.1.3 Macleod's "Transitive Perfect" Proposal

Barbara MacLeod (2004) has argued compellingly that they are indeed used as verbs in these contexts. She

presents the argument that 'u-CHAB'/KAB'-ji-(ya) . . . belongs to a set of derived transitive verbs in perfect active status marked with a suffix **-VVj* (from ***-/V-εj*) which originated as perfect participles. I regard the suffix on them as cognate with that found on both gerunds and inflected perfect verbs in Tzeltalan and Tojolabal. (MacLeod 2004:292).

In what follows, I will present arguments in favor of MacLeod's view that the suffix on these verbs is indeed cognate with that found "on both gerunds and perfect verbs" in Tzeltalan and Tojolabal." However, I will also argue for a different characterization of this suffix and will present evidence that it functions more like a resultative or a statal perfect in the manner defined in linguistic typological studies. I will also present evidence for the view that, although resultatives can sometimes be translated into English or Spanish using present and past perfect forms, these equivalencies are only partial and can sometimes be misleading. I will also argue that some other similarly shaped suffixes are not equivalent to the forms used in these resultative constructions but are instead often only partially or superficially related from a synchronic standpoint. Some do not even appear on the same types of stems. Others produce new stems and forms with quite different functions. Even those that serve as participles or gerunds do not function in the same way as the transitive resultative suffixes. Some, that seem to share similar forms at one time in the same language, have undergone changes independently of their possibly diachronically related counterparts. These changes can be tracked during the time between the early colonial documentation of the languages and their closely related modern counterparts. Finally, I will attempt to provide theories concerning the diachronic origin and development of the suffixes used for the resultative

constructions. These suffixes function as resultative inflection or markers on verb stems both in Classic Period Ch’olan and in Colonial and Modern Tzeltal and Tzotzil.

Because evidence for the existence of resultatives in Tzeltal and Tzotzil is not limited to transitives, it will also be necessary to discuss the nature of intransitive resultatives in these languages although they are not discussed as such in MacLeod’s (2004) article. I will offer arguments for the identification of a different resultative suffix for marking intransitive resultatives in the Classic Ch’olan Period texts, which will be addressed separately later in Section 5.2.

Derivation		
(93)	1. {eM}	'perfect intransitive participle'
	2. em	
	3. eM (or em: . . .)	
	4. no alloforms	
	5. Derives a perfect intransitive participle from all iv stems except passives in {ot}	(Kaufman 1971:83)
(94)	1. {bil}	'perfect passive participle'
	2. b tf + VI aj	
	3. bil	
	4. no alloforms	
	5. derives the perfect passive participle of all transitive verb stems	(Kaufman 1971:83)
Inflection		
(9)	1. {oh}	'transitive perfective'
	2. . . .	
	3. OEh (or oh)	
	4. perfect of tv	
	5. Examples:	
	y 'àl oh	'he has said'
	h pòš taY eh	'I have cured'
		(Kaufman 1971:110)

Figure 136. Forms designated as “perfect participle” and “perfective aspect” suffixes in Tzeltal by Kaufman (1971).

4.2 Resultatives in the Tzeltalan Languages

4.2.1 “Perfect Participles” and “Transitive Perfective” in Tzeltal

In his *Tzeltal Phonology and Morphology*, Kaufman (1971) isolates three forms that are related to what he designates as the “perfect” or “perfective aspect.” Note the three entries from this work by Kaufman shown in Figure 136. Although he does identify *oh* (*OEh*) (*oj* in the orthography being used in this study), as perfective inflection on transitive verbs, he characterizes the other two suffixes shown in Figure 136 as derivational suffixes. He lists *-em* as a suffix deriving a “perfect intransitive participle” that appears on intransitive stems other than passives in *-ot*. Likewise, *-b’il* is described as deriving a “perfect passive participle.”

Although we will be examining various forms of these three suffixes as a group, Kaufman here does not classify the first two, *-em* and *-b’il*, together with the last, *-oh* (*OEh*), as verbal inflection. Among other points, this differing analysis will be evaluated while investigating the nature of these suffixes and the role they play both synchronically and diachronically in the Tzeltalan languages. The references by Kaufman here are specifically to Tzeltal, but the equivalents of these suffixes will be seen to play a similar role in Tzotzil. The purpose here is not to directly disagree with Kaufman’s analysis, but rather to provide evidence and arguments for a broader analysis and a more differentiated historical view especially of two of these suffixes, *-oj* and *-em*, and their variants.

4.2.2 “Perfect Participles” and “Transitive Perfect Inflection” in Proto-Tzeltal-Tzotzil

In a work published a year later covering both of the Tzeltalan languages, Tzeltal and Tzotzil, Kaufman’s (1972) reconstruction of the Proto-Tzeltal-Tzotzil equivalents of the three suffixes shown above is essentially the same. As shown in Figure 137, he again analyzes the same two suffixes **-em* and **-b’il* as derivational suffixes, deriving participles from intransitive and transitive verbs respectively. I have added another nominalizer reconstructed by Kaufman **-ex* ∞ *-ox* (**-ej* ∞ *-oj* in ALMG orthography).

Also as before, Kaufman classifies **-ex ∞ -ox* (**-ej ∞ -oj*) as inflection although he does not do the same for the two perfect participles in **-em* and **-b'il*.

Although not explicitly stated here, the suffix *-b'il* warrants an analysis one level lower than that of the suffixes *-ej ∞ -oj* and *-em*. Kaufman has classified this suffix as one that forms a perfect passive

participle. But he also suggests that it could be parsed further

based upon its possible origins (cf. Kaufman 1989:3.A.4:11-14). Starting with a transitive verb, the *-b'* derives a passive. The *-il* then derives a verbal noun, a participle, from the derived passive stem. This unbounded passive in **-ab'* is reconstructible in several Mayan branches including Wastek, Yukatek, and Eastern Mayan (Kaufman 1989: 3.A.4:12). What is more, Kaufman also reconstructs two other similar suffixes in some of these languages – a versive (inchoative) in **-(o)b'* for the same three branches and for Western Mayan; and an assumptive in **-(e-:'-')b'* for Eastern Mayan.

If this scenario is correct, there is a basic difference among these suffixes. Unlike *-b'il*, *-ej ∞ -oj* and *-em* do not consist of two different morphemes. In other words, they do not consist of one morpheme to derive a verb form and another to derive a nominal from it. Implicit in Kaufman's description of the suffix *-em* in Tzeltal and Proto-Tzeltal-Tzotzil is that it serves a dual role. It both changes the aspect of intransitive verbs from declarative or neutral to perfect and it derives a noun, specifically a participle, from an intransitive verb. Although this difference is not necessarily significant, I believe that in this case it is. Its significance will be discussed in more detail later. Contrasted with both *-b'il* and *-em*, in the case of *-ej ∞ -oj*, Kaufman's analysis allows for both a derivational

[Nominal/adjectival derivation from verbs]		
A40	<i>*-b'il</i>	part.perf.pass (ad) <vt (productivo)
A42	<i>*-em</i>	part.perf.act. (ad) <vi (productivo)
A53	<i>*-ex ∞ -ox</i>	n< ciertas raíces T (improductivo)
[Inflectional Suffix on Transitive verbs]		
123	<i>*-ex ∞ -ox</i>	marca perfectivo
[Note: x here = j in ALMG orthography]		
Adapted from Kaufman (1972:103,142,145,149)		

Figure 137. Derivational and inflectional suffixes reconstructed for Proto-Tzeltal-Tzotzil

and an inflectional set that can be suffixed to transitive verbs, with the latter being classified as markers for the perfect aspect.¹²⁷

Bachajón Tzeltal		
a) <i>oj/-ej</i> Tiempo perfecto [“perfect tense”] [Transitive]		
prefijo pronominal + raíz verbal + <i>-oj/-ej</i> + sufijo pronominal		
<i>=nop</i>	aprender	[“learn”]
<i>snopoj</i>	él ha aprendido	[“he has learned”]
<i>snopojic</i>	ellos han aprendido	[“they have learned”]
<i>=a’iy</i>	oír	[“hear”]
<i>ya’iyej</i>	él ha oído	[“he has learned”]
<i>ya’iyejic</i>	ellos han oído	[“they have learned”]
(Adapted from Slocum et al. 1999:292)		
b) <i>-em</i> Tiempo perfecto [“perfect tense”] [Intransitive]		
raíz + <i>-em</i> + sufijos pronominales		
<i>talem</i>	él ha venido	[“he has come”]
<i>talemic</i>	ellos han venido	[“they have come”]
(Adapted from Slocum et al. 1999:297)		
c) <i>-b’il</i> Tiempo perfecto [“perfect tense”] [Passive]		
La voz pasiva de verbos transitivos se indica añadiendo el sufijo . . . <i>-bil</i> en tiempo perfecto, a la raíz verbal. . . .		
<i>na’bil sba</i>	conocido	[“known”]
(na’beyel saber; ba pron.)		
(Adapted from Slocum et al. 1999:293)		

Figure 138. “Tiempo perfecto” (“perfect tense”) of transitive, intransitive, and passive verbs in Bachajón Tzeltal

4.2.3 Alternative View of “Perfect” Suffixes in Bachajón Tzeltal

The differences among these suffixes, *-oj/-ej*, *-b’il*, and *-em*, will now be examined and evaluated from both synchronic and diachronic perspectives. The goal will be to provide a scenario that best explains both how these suffixes behave in the relevant

¹²⁷Note again that Kaufman used *-oh* or *-eh* for Tzeltal in Figure 136 and **-ex* ∞ *-ox* for Proto-Tzeltal-Tzotzil Figure 137. Both of these are the equivalent of *-oj* ∞ *-ej* in the ALMG orthography used here.

Modern and Colonial languages, as well as how they function, if at all, in the Ch'olan language of the Classic-Period inscriptions.

We will first examine a descriptive grammar written by members of the Summer Institute of Linguistics (SIL) for Bachajón Tzeltal. In the grammar portion of their *Diccionario Tzeltal de Bachajón, Chiapas*, Slocum et al. (1999) include examples and explanations of verbs in what they call the “tiempo perfecto” (“perfect tense”) for transitive, passive, and other intransitive verbs. They provide a formula for transitive verbs in the “perfect” along with several examples as shown in Figure 138.

Slocum et al.'s analysis of the transitive perfect tense forms *oj/-ej* in Figure 138a, despite the different terminology, is basically the same as that offered by Kaufman. They represent active transitive verbs with “perfect” inflectional suffixes. But for the form in *-em* shown in Figure 138b, Slocum et al. differ in their interpretation from that offered by Kaufman. They analyze it as an intransitive “perfect tense” form and indicate that it would be followed by a pronominal suffix indicating the pronominal subject. Finally, and perhaps even more surprising, they analyze the form in *-b'il* in much the same way. For them, the form in Figure 138c serves as “perfect tense.” At first glance, there may seem to be a difference in how they treat the passive form, since their translation “conocido,” if taken out of context, appears to simply be a passive participle. However, in translating an alternative passive in *-ot* they also provide only the participial form in their translation: *c'ambot yu'um juez* “demandado por el juez” “demanded by the judge.” That the difference between *-b'il* and *-ot* is not viewed by Slocum et al. as that between a derived nominal and a verbal suffix, is made quite clear in their analysis of the two forms:

La **voz pasiva** de verbos transitivos se indica añadiendo el sufijo -ot, -bot (con complemento indirecto) en tiempo pretérito, o -bil en tiempo perfecto, a la raíz verbal. (Slocum et al. 1999:293)

The passive voice of transitive verbs is marked by adding the suffix *-ot*, *-b'ot* (with an indirect complement) in the preterite tense, or *-b'il* in the perfect tense, to the verbal root. (My translation)

Thus Slocum et al. make it very clear that the difference between the two passives is not that one is a verb and the other a participle, but rather that one is “preterite tense” (completive aspect) and the other is “perfect tense” (“perfect” aspect). The important point for the present purposes is to note that these linguists make no essential distinction in the way the transitive and intransitive forms of the “perfect” operate. According to their analyses, these suffixes function to inflect the verbs for the “perfect tense” (“el tiempo perfecto”), the difference between them being that they do so on different types of verbs: *-oj/-ej* inflects active transitives and *-em* inflects intransitives. Unlike them, the suffix *-bil* also derives passives from transitive verbs as well as inflecting for the “perfect.” However, in Bachajón Tzeltal, none of the three types of suffixes require an auxiliary to form what they call the “perfect tense” (“tiempo perfecto”). Auxiliaries are required in the Spanish translations of all three verbal constructions.

4.2.4 Alternative View of “Perfect” Suffixes in Tzotzil of San Andrés

Another descriptive grammar written by members of the Summer Institute of Linguistics (SIL) is that of Delgaty and Ruíz Sánchez (1978) analyzes the Tzotzil language of San Andrés. Excerpts from their work shown in Figure 139 reveal much the same analysis of the “perfect tense” forms as provided for Bachajón Tzeltal. Auxiliaries are not required in either the transitive or the intransitive “perfect” constructions. This is an indication that these forms are being used as verbs and not as nominals such as participles or gerunds. However, in Spanish, it is necessary to translate both the transitive and the intransitive “perfect tense” using a Spanish past participle and an auxiliary.

One difference between Tzeltal and Tzotzil transitive “perfects” is that whereas Tzeltal attests an *-oj* suffix for CVC transitives and an *-ej* suffix for non-CVC transitives,

Tzotzil attests *-oj* for both. The significance of this difference for the viewpoint being taken here in this study will be explained later.

Tzotzil de San Andrés		
a) El tiempo perfecto (“Perfect tense”) [Transitive]		
<i>cac’oj</i>	he dado	["I have given it"] (Adapted from Delgaty and Ruíz Sánchez 1978:395)
<i>jamanoj</i>	yo he comprado . . .	["I have bought it"]
<i>yiloj</i>	él ha visto, ella ha visto	["he has seen; she has seen"] (Adapted from Delgaty and Ruíz Sánchez 1978:397)
b) El tiempo perfecto (“Perfect tense”) [Intransitive]		
<i>talemun</i>	he venido	["I have arrived"] (Adapted from Delgaty and Ruíz Sánchez 1978:395)
<i>talem</i>	él ha venido, ella ha venido	["he has come; she has come"]
<i>abtejem</i>	él ha trabajado, ella ha trabajado . . .	["he has worked. She has worked"]
<i>abtejemic</i>	ellos han trabajado, ellas han trabajado	["they (masc.) have worked"] ["they (fem.) have worked"] (Adapted from Delgaty and Ruíz Sánchez 1978:419)
c) El tiempo perfecto (“Perfect tense”) [Passive]		
<i>chucbil</i>	ha sido amarrado (por alguien)	["has been tied up (by someone)"]
<i>Chucbil xa li vacaxe.</i>	El toro ha sido amarrado (por alguien)	["the bull has been tied up (by someone)"] (Adapted from Delgaty and Ruíz Sánchez 1978:429)
d) El tiempo pluscuamperfecto (“Pluperfect tense”) [Transitive]		
<i>yac’oj xa ox</i>	él había dado, ella había dado . . .	["he had given, she had given"]
<i>yac’ojic xa ox</i>	ellos habían dado, ellas habían dado	["they (masc.) had given"] ["they (fem.) had given"] (Adapted from Delgaty and Ruíz Sánchez 1978:401)
e) El tiempo pluscuamperfecto (“Pluperfect tense”) [Intransitive]		
<i>abtejemun xa ox</i>	yo había trabajado	["I had worked"] (Adapted from Delgaty and Ruíz Sánchez 1978:419)
<i>abtejemot xa ox</i>	usted había trabajado	["you had worked"] (Adapted from Delgaty and Ruíz Sánchez 1978:420)

Figure 139. “Tiempo perfecto” (“perfect tense”) of transitive, intransitive, and passive verbs in San Andrés Tzotzil

Although there does not seem to be a real difference in interpretation between Tzeltal and Tzotzil, Delgaty and Ruíz Sánchez make it even clearer that the passive forms

of the “perfect” in *-b’il* are used as verbs and not only as participles or gerunds. This can be seen from the example in Figure 139c. The passive verb form in the example *chucbil xa li vacaxe* “The bull was already tied up” needs no auxiliary but is used directly as a verb in the Tzotzil sentence.¹²⁸

Delgaty and Ruíz Sánchez also expressly provide a way to express another “tense” that is found in Spanish, the past perfect, also known as the “plusquamperfect” or “pluperfect.” This is accomplished by simply adding the adverbial phrase *xa ox* “already,” as can be seen in Figure 139d and e.¹²⁹ In sum, Delgaty and Ruíz Sánchez find that the perfect and plusquamperfect are the same in Tzotzil as the “antepresente” and the “plusquamperfecto” in Spanish. Their examples show that what they, at other times, call the “perfect tense” (“tiempo perfecto”) and “plusquamperfect tense” are very much like their counterparts in Tzeltal.

4.2.5 Fresh Look at Tzeltal and Tzotzil “Perfect”

Most significant at this point is the difference in the analysis of the intransitive “perfect” suffix *-em* between Kaufman and the two groups of SIL linguists. Although Kaufmann categorizes *-oj* ∞ *-ej* as a perfect status marker, he describes *-em* as a suffix that derives perfect participles from intransitive verbs. Both Slocum et al. and Delgaty and Ruíz Sánchez interpret both suffixes as “perfect tense” markers. Unlike Spanish and English, their analysis and data indicate that auxiliary verbs are not required to create verbal constructions with them since these verb forms themselves are not simply participles. This also applies to passives in *-b’il*, although that is more explicit in the case

¹²⁸It is important to note that the English translation here in the text is of the Tzotzil sentence while the translation in Figure 139c is of the Spanish sentence provided by Delgaty and Ruíz Sánchez.

¹²⁹The use of the adverb *xa* in Tzotzil is a close match for *-ix* in Tzeltal, both with the meaning of “already” (Stross pers. com. 2007; Slocum et al. 1999:274; Delgaty and Ruíz Sánchez). Laughlin (1975:70; 1988:155) analyzes *ox* as a “particle expressing completed time in both Colonial and Modern Tzotzil. (However, Delgaty and Ruíz Sánchez (1978:434) analyze *ox* as an adverb indicating imperfective action or an action without an outcome or result “acción imperfecta o sin éxito” in San Andrés Tzotzil.) Together, *xa* and *ox* form an adverbial compound meaning “already completed.” That leads then to the “pluperfect-tense” analysis given to it by Delgaty and Ruíz Sánchez.

of the Tzotzil of San Andrés as analyzed by Delgaty and Ruíz Sánchez. Having explicitly noted functional similarities among the three suffixes, the question remains whether the categorization of the forms themselves as marking “perfect” aspect or tense (“tiempo”) inflection is the most accurate classification

Before reaching any conclusions on this issue, the analysis of two additional linguists will be examined, one covering Tzeltal and the other Tzotzil. Although they are analyzing two different, albeit closely related, languages, one of them was aware of the other's work. John Haviland (1999:Introd.; 1981:5), when writing about Tzotzil, explicitly acknowledges this connection. “I have been inspired by John Smith's *Manual de Tzeltal* (or *El Tzeltal como Quien Dice*), a model that I have shamelessly emulated here.” What is more, their analysis of what has been referred to as the “perfect” is also quite similar. Because of the direction of this influence, Smith's (1999; n.d.) Tzeltal grammar will be addressed first.

4.2.6 John Smith's *Manual de Tzeltal* and the “So-called Perfect”

Soon after beginning his section on the intransitive “perfect,” Smith makes it clear that this category does not correctly encompass or specifically address the forms that he is analyzing.

Intransitive verbs form **a so-called perfect** by means of the suffix *-em*. **It does not refer to an action, but rather the result from an action.** The sentence *ban talem?* asks not “Where did he come from?” but rather “**Where is he from?**/Where does he come from?” (Smith 1999:§3.3.6.2, emphasis added)¹³⁰

¹³⁰The works of both Smith (1999) and Haviland (1999) appear in various formats online and as downloadable files. Although they do include page numbers in some formats, they do not include them online and the page numbers differ among the downloadable versions. For that reason, both of these works will be referenced by section number instead of page number for easier access.

First, Smith writes, “a so-called perfect,” thereby indicating that he is simply borrowing a term that others use to refer generally to the form created by adding the *-em* suffix to an intransitive verb. He then states why he thinks the term is not accurate. The reference is to what results from an action, and not to the action itself. It would refer directly to the action if it were a perfect form in the sense of an actional perfect.¹³¹ Although the resultative connotation is sometimes a part of the perfect aspect, as it can be in English (cf. Anderson 1982:228; MacLeod 2004:293), this is only one of several characteristics that may be represented by the English perfect. The question is whether it is best to call this the perfect aspect in the Tzeltalan languages based upon only that one characteristic which is not present in all incarnations and does not need to be. These essential theoretical questions concerning meaning will be addressed soon in Section 4.3. Eventually, it also raises related questions concerning translation that will be addressed later as well.

Smith characterizes the “perfect” of transitive verbs in much the same way:

The perfect tense of transitive verbs is formed by means of the suffix *-oj* (*-ej* after *y*). **It takes the possessive prefixes, but does not carry a temporal prefix. It signals a state that results from a previous action.** (Smith 1999:§3.3.9, emphasis added)

So Smith agrees with the SIL linguists that the suffixes *-em* and *-oj* ∞ *-ej* play precisely the same role except that the former does so for intransitive verbs and the latter for transitive verbs. But he differs from them in stressing that both of these suffixes

¹³¹Because “Where does he come from?” can be interpreted in some contexts as simply the present tense of “Where did he come from?” it does not express the difference as clearly as “Where is he from?” Smith clearly intended both of these sentences, those with “does” and “is,” to be interpreted in the same way, that is, to express the resultative and stative character of the action. The original contrasts “¿de dónde viene?” and “¿de dónde es?,” asking about place of origin or birthplace, with “¿de dónde vino?,” asking about the place from which one just came (Smith n.d.:44). Note also that the translator does not use “has” here at all although he does in some of the other contexts in which this form occurs. This indicates that the presence of “has” is dictated by something other than just the suffix alone.

effect not really a “perfect” in the usual sense but rather signal “a **result**” or “a **state** that **results**” from an action.

It has already been noted that both Slocum et al. and Delgaty and Ruíz Sánchez characterize the effect of the of the suffix *-b'il* in much the same way: “Este sufijo [*-b'il*] indica el estado del sujeto” (Delgaty and Ruíz Sánchez 1978:429), “This suffix indicates the **state** of the subject” (emphasis added). Smith writes something quite similar about the “perfect passive” form in *-b'il*.

The perfect passive looks more like the intransitive perfect [than the passive in *-ot*] in that it refers to **the state of something**, and it resembles the passive participle in English:

talem te jjwane. [intransitive perfect]

"Juan is arriving."

makbil te ti' nahe

"The door is closed."¹³² [perfect passive]

(Smith 1999:§3.5.5.6, emphasis added)

While Smith discusses the suffix *-b'il* in a section treating passive forms, he still notes that the result of verbs formed with this suffix are more like "perfects" than passives. Even more important for a correct understanding, is the emphasis it places not on an action has been performed upon a subject but rather that the subject is **in a particular state that is a result** of that action.

¹³² Although reference is made here to the "English passive participle," some grammarians would refer to the form "closed" in these contexts as the "past participle." It is used in the example to form a sentence in the passive voice. Alternatively, it could be analyzed as a participle used as an adjective or predicate nominative.

4.2.7 John Haviland's "STAT" Aspect in Tzotzil

What is stated quite clearly by Smith concerning the functional similarity of the three forms constructed with the suffixes *-oj* ∞ *-ej*, *-em*, and *-b'il* in Tzeltal is further refined, clarified, and categorized by John Haviland for Tzotzil. After noting that "Verbal sentences, unlike the stative sentences we have been considering, are obligatorily marked for tense or aspect," Haviland provides this explanation:

In modern Zinacantec Tzotzil the verbal system is aspectual, in that it distinguishes, by means of verbal inflection, between completed and incompleted actions; **a third aspect denotes states that result from actions**, and an unmarked or neutral aspect occurs in certain special contexts (negative sentences, for example). (I will abbreviate these aspects as COMP, INC, **STAT**, and NEUT respectively.) Aspects are marked by means of prefixes in the case of COMP, INC, and NEUT aspects, and **by a suffix attached to the stem in the case of STAT aspect**. (Haviland 1988:92; emphasis added)

The suffixes we have been examining all designate "states that result from actions." Haviland calls the aspect so characterized "stative," which he abbreviates as "STAT." This should not be confused with "stative sentences" which he and other Mayan linguists use to refer to sentences without verbs or copulas. Haviland characterizes the transitive stative in this way.

The stative form of a transitive verb denotes the state that results from performing some action. This is formed with **the stative suffix *-oj*** which is added to the verb stem. Pronominal objects engender absolutive suffixes that follow *-oj*.

Kilojot 'onox.

I have always seen you. (In other words: I know your face.)

Smajojon lek; yech'o i'och ta chukel.

He has hit me a lot; that's why he went to jail.

(Haviland 1999:§8.5; emphasis added)

It is important to note that Haviland here and in the grammar portion of Laughlin's (1988) rendition of the Colonial "*Great Tzotzil Dictionary of Santo Domingo Zinacantán, Volume I*, expressly calls *-oj* a "stative suffix" rather than a "perfect suffix."

Of the intransitive forms in *-em* in modern Tzotzil, Haviland states the following:

the meaning of this form is, to be more precise, stative: the form with *-em* **indicates that the subject is in the state resulting from the action, process, or the event denoted by the verb.** The *-em* verb forms bear a strong resemblance to adjectives. . . .

Batem ta Jobel li Xun e. John has gone to San Cristóbal. . . .

Komem ta na li jluk e. My sickle is in the house (Literally: It remains in the house). (Haviland 1999:§6.1; emphasis added)

What Haviland has to say of the passive stative form in Tzotzil is very much like what Smith had to say about the passive perfect.

Manbil li 'ixim e.

The corn was bought.

Manbilon 'ixim.

The corn was bought for me.

(In other words: I am in the state of having received corn that they bought me.)

One can see that the stative passive forms use a special suffix *-bil*. This suffix transforms a transitive verb into a word that bears a resemblance to the passive participle in English. (Haviland 1999:§8.9)

I hope that juxtaposing these different analyses of the verb forms in *-em*, *-oj* ∞ *-ej*, and *-b'il* provides a clearer view of their similarity in usage and function despite the differences in the verb types to which they are attached. Instead of viewing one of them, *-oj* ∞ *-ej*, as a verbal suffix serving as a status marker and the other two *-em* and *-b'il* as participial nominalizers, we take the SIL linguists' cue and view them all as generating verbal forms with the added proviso that *-b'(il)* also serves the duty of deriving an intransitive in the passive voice from a transitive verb. But instead of agreeing that these forms in themselves constitute the perfect as the SIL linguists imply, I side with Smith and Haviland in arguing that these forms, the stems with their suffixes, are instead verbs inflected for the "stative" or "resultative" aspect. As Haviland analyzes them, they are inflected as STAT or "stative," one of four aspects he detects in Tzotzil.

It is only after establishing the formats of the four aspects, that Haviland (1988:92) goes on to mention other purposes which they can serve. "These aspectual variants, in **combination with explicit temporal particles, and in particular contexts, often correspond to past, present or future, and perfect tenses.**" So the verbs formed by the suffixes that are the focus of our attention here are not the equivalent of the perfect. They are not in themselves sufficient to form what Haviland calls the "perfect." Instead, they may combine with "explicit temporal particles" "in particular contexts" to form the perfect.

4.3 Discussion of Forms and the Terminology Used to Refer to Them

While I agree with the point Haviland makes here concerning the formation of the past, present, future, and perfect, I would hesitate calling the perfect a "tense." Instead, the perfect, as it is usually used, consists of a combination of time and aspect. Up to now in this discussion of these particular verbal suffixes, the categories of "perfect," "resultative," and "stative" ("STAT") have been used by different linguists and by me in this study to designate the grammatical functions of the same verbal suffixes. What is problematic about these terms is that, although they describe functions that are to some

degree related, they are really not the same. Each can be distinguished from the others by real differences in the behavior of the verbs they modify and in the characteristics of the grammatical contexts in which they occur.

I have already indicated that I prefer the term “resultative” because it best reflects actual usage. What remains, is to define the terms and then continue on to explain how the suffixes and forms under consideration function in Tzeltal, Tzotzil, and most important, in the Classic Ch’olan texts.

4.3.1 Typology of Stative, Resultative, and Perfect Aspects

Addressing first the term “stative” in regard to verbs, Vladimir P. Nedjalkov and Sergej Je. Jaxontov (1988:6), in a book examining the typology of resultative constructions (Nedjalkov 1988), describe it in this way: “The term stative is applied here to forms (including both grammatical verb forms and derived verbs . . .) which denote states.” Compared to it, “[t]he term resultative is applied to those verb forms that express a state implying a previous event.” They continue by writing:

The difference between the stative and the resultative is as follows: the stative expresses a state of a thing without any implication of its origin, while the resultative expresses both a state and the preceding action it has resulted from. Therefore the stative may denote natural, primary states which do not result from any previous event. (Nedjalkov and Jaxontov 1988:6)

A stative verb form, according to this narrow definition, would therefore indicate only a state and would not imply anything in regard to a previous event from which it resulted. A resultative verb would both indicate a state and imply a previous action from which it resulted. At first glance it might seem that Haviland’s example above, *komem ta na li jluk e*, fits the definition of a stative in this narrow sense as not implying an origin or causal action, especially if one translates it as “My sickle is in the house.” But when one

refers instead to his literal translation “It remains in the house,” the question that immediately becomes relevant or possible is “How did it get there?” or perhaps more accurately “Who let it remain there?” Some of the meanings of the intransitive verb *kom* in Colonial Tzotzil include “be left, remain, stay” (Laughlin 1988:223), all of which imply or allow for the question as to who or what originally left the sickle or let it remain there. What is more, as we have already seen, Haviland (1999:§6.1) himself notes that the “stative: the form with *-em* indicates that the subject is in the state resulting from the action, process, or the event denoted by the verb.” But that is precisely what distinguishes “resultative,” in the narrow sense of the word, from “stative” in its narrow sense. One reason why the term “resultative” is being used here is because it better fits the type of construction under consideration. This difference from Haviland’s usage is one of terminology only since his explanation of the construction itself is essentially the same as the one being offered here.

There is another reason why “resultative” is chosen here over “stative” as the more appropriate term. As noted by Nedjalkov and Jaxontov (1988:7)

The two types share a number of important properties, and many claims about the resultative are valid for the stative. Besides, it is not always easy to distinguish between statives and resultatives (or, in other words, between states proper and resultant states that presuppose a previous action). Therefore in the rest of this chapter all forms expressing states of either kind are collectively called resultative, covering both resultatives and statives.

In fact, this broader usage of resultative was followed by the other authors in the book as well except in cases where such a distinction was required to make a specific point relevant only to either of the two more narrowly defined categories. What remains at this time is to compare resultative constructions in the broad sense to perfect constructions and to distinguish them from each other. The following sentence gives a

broad idea of the difference with (a) being an example of a perfect and (b) an example of the resultative. As noted by Nedjalkov and Jaxontov (1988:7), the sentence in (b) is a logical consequence of that in (a): “a. John has broken a stick; b. The stick is broken.”

Although English does not have specific separate morphological suffixes to express resultatives, it does have different constructions to express some of the same ideas. The example just presented and those shown in Figure 140 should help to provide a better understanding of their behavior. Since they are English translations of examples from other languages, not all of the b. sentences are strict consequences of the a. sentences in English. For English this type of relationship holds only for (4), (6), (9), (11), (12) and (13) of Figure 140.

- | | |
|-----|---|
| 4) | a. John’s eyes have inflamed →
b. John’s eyes are inflamed; |
| 5) | a. John has sat down →
b. John is sitting; |
| 6) | a. John has shaved (himself) →
b. John is shaven; |
| 7) | a. John has taken a stick →
b. John is holding a stick; |
| 8) | a. John has put on a hat →
b. John has a hat on; |
| 9) | a. John has opened his eyes →
b. John’s eyes are opened; |
| 10) | a. John has put a stone on the road →
b. There is a stone on the road; |
| 11) | a. John has opened the door →
b. The door is opened; |
| 12) | a. John has built a house →
b. The house is built; |
| 13) | a. John has eaten the cake →
b. The cake is eaten up; |

Adapted from Nedjalkov and Jaxontov (1988:7-8)

Figure 140. Comparison between perfect (a) and resultative (b) sentences

4.3.2 Resultative Versus Perfect: Adverbial Tests

What then are the distinguishing characteristics of the perfect and the resultative? Again, the following definitions and criteria are provided by Nedjalkov and Jaxontov (1988:15): “The term **perfect** is used here to refer to a form that expresses an action (process, or state) in the past which has continuing relevance for the present.” But these characteristics appear to be the same as those that MacLeod (2004), referring to Anderson (1982), claims for the resultatives of the Classic period texts: “The perfect may have an experiential function, as in ‘I have been to Mexico’, or a result-state function as in ‘he has

gone’ or ‘he has eaten dinner.’” MacLeod (2004:293). However, as is often the case, the devil lies in the details.

Although “He has gone” is provided as an example of the “result-state” function of the perfect by Anderson (1982:228), he further equates it with “He is gone,” viz. “(d) ‘result-state’: He *has* gone. (or) He *is* gone. (is not here).” But these last two sentences are clearly not equivalent. It is precisely this difference which provides one of the ways to distinguish between the actional perfect and the statal perfect, or in the terminology being used in this present study, between the perfect and the resultative.¹³³ One of the ways to make this difference clearer is by attempting to insert the adverb “still” into such clauses. “He is still gone” makes unqualified sense. “He has still gone,” if it makes any sense at all, is not the meaning originally intended when attempting to view these two sentences as equivalent. So although “he has gone” is an example of the perfect aspect, “he is gone” is, rather, an example of the resultative.

Differentiating between perfect and resultative constructions by testing which types of adverbs can occur with each and the connotations they convey in each context is not limited to English but instead can be used generally with other languages to clarify this distinction. As further explained by Nedjalkov and Jaxontov (1988:15-16),

Adverbials meaning ‘still’ freely collocate with resultatives expressing temporary states but as a rule they do not occur with other resultatives (of stable or irreversible states . . .) and with the perfect. The following example is from Armenian in which the resultative and the perfect are differentiated formally:

- (31) a. *Na (*deṛ) ənk-el e*
 He (*still) fall-PERF.PART be-3rdP. SG

¹³³Later in the same article, Anderson (1982:232) grapples with this distinction using similar examples but pronounces it “almost dead” in English. However one may feel about this distinction in English, the importance of the semantic and grammatical distinction between what Anderson calls “current-relevance perfect” and “result-state perfect” remains very much alive in many other languages.

‘He has fallen (*still)¹³⁴

- b. *Na der’ ənk-aç e*
 He still fall-RES.PART is (subj. res.)
 ‘He is still fallen.

(31b) means that he has fallen and is still lying.

These examples show that *der’* (“still”) is inappropriate with the perfect participle but not with the resultative participle in Armenian. Although in English the difference lies in the choice of auxiliary rather than of the participle, the effect is similar. If one takes the pair presented earlier, “John has broken a stick” and “The stick is broken” as examples of the perfect and the resultative, respectively, it is easy to see that “still” cannot be added to the first sentence, the perfect, while maintaining the same meaning, but it can be added to the second: “John has (≠still) broken a stick” and “The stick is (still) broken.” Inserting “still” into the examples shown in Figure 140 provides much the same result. The reason for this difference is that, with the perfect, the emphasis is on the act that is being performed while with the resultative, the emphasis is upon the state that results from an action. If Smith and Haviland are right in their analysis of Tzeltal and Tzotzil, it is the state that results from an action that is expressed by the constructions they describe.

But “still” and similar adverbs or contexts are not the only way to distinguish resultatives from perfects. Two more examples from Armenian can help to further illustrate differences between perfect and the resultative constructions:

- (77) a. *Gevorgə kangn -el e*
 Gevorg stand-up -PERF.PART be-PRES

¹³⁴Note that here the asterisk preceding a word indicates that it does not normally occur in the particular context and would usually create a meaningless or grammatically inappropriate sentence.

- ‘Gevorg has stood up’ (perf.)
- b. *Gevorgə kangn -aç e*
 Gevorg stand-up -RES.PART be-PRES
 ‘Gevorg stands’ (pres. subj. res.);¹³⁵
- (78) a. *Verkhə lavac -el e*
 Wound heal -PERF.PART be-PRES
 ‘The wound has healed’ (perf.; takes the adverb ‘fast’)
- b. *Verkhə lavac -aç e*
 Wound heal -RES.PART be-PRES
 ‘The wound is healed’ (pres. subj. res.; does not take the adverb ‘fast’)
 (Nedjalkov and Jaxontov 1988:39)

In these examples, the meanings of the two sentences, (77)a. with the perfect form of the verb and (77)b. with the resultative, are quite different. The perfect form concerns the act of standing up, the resultative refers to the state resulting from the act of standing up. In example (78) the actual meaning of both forms seems to be very close. However, the difference between the two forms in both (77) and (78) is noticeable when one attempts to use the same adverb in both the a. and b. forms. With the perfect forms in both (77)a. and (78)a., the adverb “fast” (relating to speed) could be meaningfully used. “Gevorg has stood up fast” and “The wound has healed fast.” With the resultative forms in (77)b. and (78)b., “fast,” indicating speed, is not meaningful precisely because the form signals a resultant state rather than an action. Neither “≠Gevorg stands/is standing fast,” nor “≠The wound is healed fast” represents a meaningful sentence.¹³⁶ It does not because the speed of an action is not relevant if one is focusing solely upon the result of an action and not upon the action itself. Speed normally makes sense only when referring to an action and not to a resultant state.

¹³⁵In English one might say instead ‘Gevorg is standing.’

¹³⁶“Standing fast” is meaningful in English but not in the way intended here.

Of course, different languages have varying requirements for both perfect and resultative aspects. English is especially known for a perfect construction that differs functionally and semantically from that of some closely related languages. This is especially true of the present perfect form. Jespersen ([1924] 1951:270) noted some time ago that “English is more strict than most languages [in distinguishing the perfect from the preterite], and does not allow the use of the perfect if a definite point in the past is meant, whether this [specific time] be expressly mentioned or not.” That is one of the reasons why the English present perfect is especially unsuitable for translating the resultatives in Classic Ch’olan since their use is almost always in contexts where a specific day is expressly stated. Still, it should be kept in mind that although this distinction between the perfect and the resultative may be clearer when compared with English, it still exists when compared with other languages as well, as also noted by Nedjalkov and Jaxontov 1988:16).

Collocation of adverbials of moment (momentary adverbials) with the perfect varies from language to language. In many languages (though not all; cf. English, Norwegian) the perfect form can take an adverbial of time indicating the moment at which the action took place (e.g., at 7 o’clock in the morning). With the resultative, such an adverbial can only indicate a moment at which the state is in existence.

So, even if not always as restrictive as English, differences still exist between perfect and resultative forms in regard to temporal adverbs that can be used with each of them. The differences between the perfect and the resultative are not obscure and they are indeed meaningful. In fact, they are sometimes even stated in matter-of-fact terms by linguists without assuming a need for argumentation as reflected in this passage from Kozinskij (1988:517):

It is assumed, of course, that the form under scrutiny has aspectual features typical of a resultative, e.g.: it can freely combine with adverbs like "still", it does not admit adverbs like "quickly", it can have a typically resultative interpretation with adverbs like "today" or "presently", etc.

This does not mean that there are clear examples of such adverb-verb combinations in the Classic Period texts, but that these are ways to help highlight the real differences that exist. "Still," in its temporal meaning, does not work with the perfect while it does with the resultative;¹³⁷ and the perfect works with "quickly" while the resultative does not. This is precisely because the perfect stresses or refers to the action and the resultative refers to the resultant state.

4.3.3 Resultative Versus Perfect: After-effects

Another distinction that exists between the perfect and the resultative is that “the after-effects of the action expressed by the perfect are non-specific and they are not attributed to any particular participant of the situation” (Nedjalkov and Jaxontov 1988:15). Macleod (2004:293) lists the sentence “He has eaten dinner” as a second example of a “result-state” perfect. Yet, this sentence clearly passes the tests given so far for being an actional perfect and fails those for being a resultative (that is, a “statal” or “result-state” perfect). It is also not listed by Anderson (1982:228) as such. Instead, he provides the example “He *has* studied the whole book,” which is essentially equivalent in its relevant details to MacLeod’s “He has eaten dinner.” Anderson classifies this type of perfect as indicating “current relevance of anterior” and **not** as indicating “result-state.”

¹³⁷See also Bybee et al. (1994:65) who note that “the resultative with *still* indicates that the state persists, but the anterior [i.e. perfect] with *still* requires that *still* take on a non-temporal sense of ‘nevertheless’ as in *I still insist that he has gone.*” In other words, this last sentence is a paraphrase of the perfect construction in “He has still gone” while “still” maintains its more common temporal meaning with the resultative construction in “He is still gone.”

No argument is being made here against the capacity of the perfect to indicate “continuing or current relevance,” which MacLeod (1984:293) considers “Perhaps more important than the anterior event.” But the relevant question is really whether the type of current relevance offered by the perfect aspect matches that demanded by the Classic-Period texts and most of the Tzeltalan resultative constructions, which do not mirror the auxiliary plus participle examples in English or Spanish. In other words, does the perfect allow for after-effects and relevance that are **specific** and attributable to a specific participant in the situation?

Taking an example from English that is basically the same as those offered by MacLeod and Anderson, the most likely after-effect or continuing relevance of the sentence “He has closed the library” would be the resultative “The library is closed.” If one wished to keep the actor as the subject, it would usually be the action that would be highlighted, likely expressed best as a completive, preterite or simple past: “He closed the library.” For anything emphasizing the current state of the actor, one would likely have to generalize the situation as, for example, in the sentence “He has closed libraries.” This statement stresses the ability, experience, or function of the actor, but **fails to maintain**, by that very fact, **the uniqueness of the action or of its after-effects**. Although this situation is especially characteristic of the English perfect, it is applicable to the perfect in varying degrees in other languages such as Spanish and even in the more recent modified perfect constructions formed with an auxiliary in Modern Tzeltal.¹³⁸

If one interprets the two most common constructions with resultative suffixes in the Classic-Period texts (see Figure 134 and Figure 135 above) as perfects instead, the interpretation and translation “He has overseen it [a specific capture]” and “He has watched over it [a specific period ending],” the most likely following state would be “the

¹³⁸See also the discussion below of the development of the perfect in Indo-European (Section 4.4.1) and Tzeltalan (Section 4.4.2). That the English perfect is representationally adequate for evaluating the perfect in general is supported by Bybee et al.’s (1994:61) comment “The English Perfect is a good example of an anterior: according to Dahl’s [(1985)] analysis of the anterior in thirty-two languages of his corpus, the English Perfect has the second highest correspondence to his proposed universal prototype.”

capture was overseen” and “the period ending was watched over” both of which are, to be sure, true, but do not likely incorporate the desired emphasis or semantic intent. But if one interprets the effect as subject-oriented instead, then one could no longer be referring to one particular action but rather to a class or type of action or experience. If one does tie it to a specific event, then what one is encountering is a phenomenon noted by Jespersen (1951:270) by which “it appears difficult to keep up the sharp distinction between the idea of the present result of past events and that of those past events themselves: the perfect tends to become a mere preterit.” Recalling what we have presented here concerning the perfect, this is quite understandable since the perfect already emphasizes the action rather than the result. On the contrary, interpreting the original statement instead as the subjective resultative, as we shall later argue, provides the meaning “He is in the state of having overseen it” or “. . . having watched over it.” In effect, the resultative implies the connotation that he is an overseer or a caretaker of a *particular* event, not that he has mastered or experienced a *type* of event as is often implied by the perfect. Not coincidentally, that is just the meaning that appears to be intended by this construction in the Classic Ch’olan texts.

Returning to the library example, one can see again that the English perfect in the sentence, “He has closed the library,” does not require the conclusion that he is a library closer in general, or even that he regularly closes libraries, or that he ever has before or after. The latter conclusions are more likely if the original sentence is generalized in the first place as “He has closed libraries.” But even that would not automatically fulfill the requirements of his being a library closer. That is why it makes unqualified sense to say, for example, “He has tended bars but he is not (“not really” or “not now” or “not by profession”) a bartender.” In other words, using a perfect construction when referring to a particular event would fail to imply that a particular state or status has been conferred. It simply does not convey the idea and connotation indicated by Smith and Haviland as typical of the resultative (their “result from an action” or “stative”). But it seems to be precisely this lasting state inhering in an individual as the result of specific action that the

Classic Period resultative is intended to convey. He/She watched over/oversaw this unique event and so now “He/She is in the state of having watched over/overseen this unique event.” The watching over/overseeing of this particular event has become a permanent part of who this particular person is.

4.3.4 Real Versus Terminological Differences

Finally, it should be noted that this whole discussion is concerned not with terminology or even just with translation, but rather with real, that is experientially significant, differences in the two types of aspect. As noted by Jurij. S. Maslov (1988:64):

If the emphasis is laid on the temporal plane of sequence, the meaning is always that of some state (or statal relation) caused by a preceding change, i.e. action proper. Forms with such meaning are customarily called "statal perfect" in aspectology. Following A. A. Xolodovich this type of the perfect is just what is defined in this book by a shorter, one-word term "resultative."

What is usually meant by “perfect” without modifiers is the actional perfect instead of the statal perfect. Whether one wishes to distinguish between the two aspects by using “perfect” with modifiers or by using two different terms altogether, “perfect” and “resultative,” is not as important as **preserving the clear distinction between them**. It is critical that one does not attribute to one type the characteristics of the other simply because one of the two words is the same. Some clear cut distinctions have already been presented. However, confusion has sometimes been created by the different terminology used by different linguists to refer to the resultative aspect. The list provided by Nedjalkov and Jaxontov (1988:18) reproduced in Figure 141 indicates the range of different terms that have been used by various linguists to refer to the resultative aspect as embodied in several different languages. Although this list betrays a lack of conformity

in choosing terms to refer to this particular aspectual category, even this sample of specific language references alone suggests that the grammatical phenomenon behind this class of verbal morphology is by no means rare.

In linguistic literature, the phenomenon referred to as resultative here is given a number of names. Here is a list of the more frequent terms in use (with references to the languages they are applied to):[*see note below]

- 1) the stative – German (Šendel’s 1970:136), Fula, Russian (Bulanin 1978:197); the form of state (synonym of "stative") – Chinese (Jaxontov 1957: 131-L35);
- 2) the resultative – Southern Paiute (Sapir 1930:155), Armenian (Kozinceva 1970:293), French (Kordi 1974:182); the resultative Aktionsart – Hindi (Hälsig 1970:357); 2a) the resultative stative (as a particular variety of the stative, a combination of 1) and 2)) and, as an abbreviation, the resultative – Nivkh (Nedjalkov et al. 1974:234-235);
- 3) the perfect – Archi (Kibrik 1977:195-197); 3a) the statal perfect (a combination of 1) and 3)) – Bulgarian (Maslov 1959:275);
- 4) the passive – Eskimo (Menovščikov 1967:79); 4a) the statal passive, or the passive of state (a combination of 1) and 4)) – German (Zustandspassiv), English (statal passive), Russian (Bulanin 1978:197);
- 5) the continuous (durative) aspect – Japanese (Syromjatnikov 1978:208-211); durative accomplishment (synonym of the durative aspect) – Selkup (Kuznecova 1980:219).

Adapted from Nedjalkov and Jaxontov (1988:18)

[*] Note: The references cited here are included in Nedjalkov (1988) but not in the References-Cited Section of this present work)

Figure 141. Some terms used by linguists to refer to resultative aspect

4.4 Resultative Inflection Versus “Perfect” Participles

As has already been noted, I am in agreement with MacLeod as to the presence and basic function of what I have been calling transitive resultative verb inflection in the Classic Period texts. However, it seems to be less clear that these “originated as **perfect** participles” as she suggests (MacLeod 2004:292, emphasis added). If they originated as

participles, they were likely not perfect participles, but rather stative or resultative participles for reasons that will soon be addressed. What is more, they are seldom used as participles in Classic Ch'olan but appear most often as active resultatives.

I have also suggested the existence of a different suffix to mark intransitive resultative verb inflection in the Classic Period and have related these to the inflectional verb forms attested and identified by Smith and Haviland in Tzeltal and Tzotzil, respectively. Contextual arguments for the existence of intransitive resultative forms in Classic Ch'olan will be provided later. It may also be possible that the use of both the transitive and intransitive resultative suffixes as verbal inflection preceded their reinterpretation as suffixes deriving nominals in the form of gerunds or participles. Some evidence for this view comes from various sources including similar diachronic progression noted in other language families, clues gathered from the ways the reflexes of these suffixes perform in both the colonial and modern Tzeltalan languages, and the behavior of these suffixes in the Classic-Period texts.

4.4.1 Typological Comparison: Antecedents of Indo-European Perfects

Among the Indo-European languages of Europe there are many that form perfects by combining a participle with an auxiliary. We have already mentioned the use of “have” in English and “haber” in Spanish. To this we could add other Romance languages and German (in its older, pre-preterite connotation). From Non-Indo-European languages one could add the Basque perfect formed with the equivalent of English “be” plus a perfect participle and the Baluche perfect formed with a participle plus the past and a copula (cf. Bybee et al. 1994:64-65). Expanding into resultatives, one could add, among others, English and Kue with “be” plus the perfect participle equivalents and Danish with “be” plus past participle and Maithili with “be” plus past passive participle (cf. Bybee et al. 1994:66-67)

Since there is a sufficient written record of the development of the current perfect construction in English, it is possible to compare it with its ancestral form. As also

reported by Bybee et al. (1994:68), Traugott (1972:83) noted that Old English formed intransitive resultatives using the verb “be” (“beo-”) along with an adjectival participle. That it was used adjectivally instead of nominally is clear because it agreed grammatically with the subject.

On thaere ilcan tide wurdon twegen athelingas afliemde ([-e] adj. ending) *of Scithian*

“At that same time were two princes put-to-flight from Scythia’ (stative)
(Traugott 1972:83)

Traugott (1972:83) goes on to explain that the passive constructions developed later from these earlier adjectival participles:

This was particularly easy as the adjectival expression refers to a state that can only have been reached after something has been done, that is, a window can only be in a state of brokenness if it has been broken. Both the passive and the stative-result constructions have remained side-by-side; in some instances the adjectival form has developed its own independent word, as in *The windows were open* (stative) versus *The windows were opened* (passive).

In this way the stative/resultative preceded the passive in English. But it also preceded the perfect. Thus Traugott (1972:93) notes the example “*We waeron gecumene* ‘we were (in the state of having) come’ where *gecumene* is an adjectival form of the verb *cum-*, agreeing in number, case, and gender with the subject *we*.” Perhaps because the adjectival form was not inflected in the 3rd pers. sing., for example, *He was gecumen*, it “could be interpreted as having no inflection at all.” Thus “He was in the state of having come” could be reinterpreted as perfect instead. Translated literally into Modern English that would be “He was come,” which later developed into “He has come.”

If one goes back to early Old English examples, the form using the verb “have” was not yet grammaticalized for use “in perfective constructions, but only in possessive ones” (Traugott 1972:93). It actually still meant literally to “have” or “hold” as in this example: “ *Ic hæfde hine gebundenne*. ‘I had him in-a-state-of-being-bound’” (Traugott 1972:93-94). Bybee et al. (1994:68) note further:

The modern Perfect develops out of these early resultatives as the participle loses its adjectival nature and becomes part of the verb rather than an adjective modifying a noun. This change is reflected in the loss of agreement on the participle and a change in word order by which the participle comes to always stand next to the auxiliary.

Bybee et al. (1994:68-69) also note that Vincent (1982) and Harris (1982) report a similar history for Spanish, Italian, French, and Portuguese involving the reflexes of the same two auxiliary verbs and participles. She reproduces a quote from Cicero using *habent* showing “the participle agreeing with the object and the sense of possession of *habēre* still present as well as a stative sense.” Similar to Old English, Latin also combined *esse* (“be”) with a participle to provide “a sense of resultative with intransitive verbs.”

This information from Old English and the Romance Languages is important for several reasons. First, it illustrates how ungrammaticalized forms often lead eventually to grammaticalized verbal constructions. But it is also important for noting that these forms that eventually came to be used in perfect constructions started instead as statives and resultatives used as adjectives. This whole phenomenon and its importance for both this study and for correctly interpreting the verb morphology of the Classic Period texts will be addressed later. Of more immediate importance is the typological evidence that resultative constructions tend to precede historically later perfect constructions. This process has been summed up well by J. S. Maslov (1988:70-71, emphasis in original)

The general direction in which perfect formations have evolved (at least, in Indo-European languages, but, perhaps, in many others, too) could be summed up in the formula: from denoting a state – to denoting an action that causes that state, and then – to simply denoting an action, . . . **In terms of aspectology, it may be said that the statal perfect evolves into the actional perfect, or that the resultative, to use the terms of this volume, turns into the perfect.**

The next question is what might precede the resultative in the narrow sense of a state implying a previous event. Maslov (1988:70) notes that

According to the hypothesis first postulated by K. Brugmann and later convincingly confirmed by L.A. Perel'muter . . . , the synthetic perfect of ancient Indo-European languages goes back to a special part of speech which denoted a state or statal relation, i.e. was a kind of “category of state” . . . or “stative.”

If this theory is correct, the earliest predecessors to perfects in Indo-European were words indicating a state. However, this may also be taken one step further if indeed such forms could actually be used as active verbs without particles, auxiliaries, or formal changes. Comrie (1976:107) has noticed that in Hindi, Urdu, and Punjabi, there is “a constant differentiation between aorist without auxiliary and perfect with auxiliary.” Comrie further states that “both aorist and perfect are formed with the past participle active and in the perfect this is accompanied by the present tense of the auxiliary *to be*, while in the aorist there is no auxiliary.”

Vit Bubenik (1997a:51) agrees that this is a good possibility. He notes especially the Hindi situation where, for example, *calā* “went” is the aorist form of the verb “go” and *calā hai* the perfect “has gone” (Bubenik 1997b:269). It may then be an oversimplification to classify the aorist form as a participle as suggested by Comrie. Since it functions as an active verb and does not require an auxiliary, classifying it as a

participle seems misleading. Also, although some languages, for example, those of the Mayan language family, allow for complex verbless sentences, that does not appear to be what is occurring here. Indeed, the form *calā* is related to earlier aorist and retrospective forms.

“The morphology of the preterit in other early Middle Indic languages (e.g. Pāli) exhibits a lot of originally aorist forms” (Bubenik 1997a:55). But it is precisely this diachronically aorist, seemingly non-participial form, which has its modern reflex in the Hindi preterit *calā* and which Comrie argues is actually still an aorist form and joins with the auxiliary *haī* to form the perfect. What is more, even if one refuses to accept *calā* as an aorist in Hindi, one still has to explain its functioning as an active preterit without the addition of an auxiliary if one indeed accepts it as a participle at all.

Of course, there is no direct connection at all between what transpired among the Indo-European languages and what might have happened in the Greater Tzeltalan language family. Nevertheless, this brief allusion to the aorist and perfect in Hindi establishes the precedent of a suffix and, thereby, a verb form being used both as an active verb and as a participle in a language at the same time. If Comrie’s analysis of Hindi is correct, it attests the use of a verb form of a particular shape as a finite aorist while at the same time being used in other contexts as a non-finite nominalized form. As such in Hindi, it can also be used with an auxiliary to create another verb form, a perfect. According to Comrie, it also exemplifies what is arguably a diachronically earlier verbal form, the aorist as represented in Middle Indic Pāli, later developing into, or being used as, a participial form without requiring the addition of a new derivational suffix.¹³⁹ This characteristic wherein the same suffix is used as inflection on a finite verb form as well as a derivational suffix on a nominalized verb, is also attested in English. Forms of the shape stem plus *-ed* are used as the past tense of regular verbs. The same suffix is used to derive participles. These participles can then be used with auxiliaries to form

¹³⁹In what seems to be a similar, albeit unrelated, later development in Tzeltal, an auxiliary combines with what are otherwise active verb forms, to provide constructions with added or different meanings or connotations. See Section 4.4.3 below.

other verbal structures such as perfect aspect or passive mood. According to Pirttisaari (2004:99) in Finnish Romani:

As a residue of the late Middle-Indo-Aryan ergativity system, finitized past participles are continuously used in past tense. Unlike most other dialects that continuously use active past participles in the 3SG past tense . . . , the finitization of participles is not restricted to intransitive verbs . . . , [with] even the past participles of transitive verbs being used actively in the 3SG past tense.

These different forms, whether adjectival participles; past, perfect, or passive participles; or past tense, are all identical in shape and may be related to the same nominal forms diachronically, but they cannot be equated synchronically. What was ancestral to all these forms may at one time have been a non-finite adjectival participle. However, once they undergo changes in function, meaning, and context of use, they can no longer be considered the same for synchronic analytical purposes. Neither do they behave the same but instead take on a new character and are subject to new rules of use. Thus, the words of the same shape in “He wanted that car,” “It was a wanted car,” “He has always wanted that car,” and “The car was always wanted by him,” have different meanings and follow different rules of syntax. As a result, they cannot, without further justification, be considered the same morphological compound from a synchronic standpoint.

The question concerning whether the finite resultative forms in Greater Tzeltalan originated prior to or after their use as participles will not be resolved here. What has been ascertained is the typological likelihood that the participial form, whether it preceded or followed the finite verbal form in origin, began as a stative. Only over time would it have developed into a perfect participle. What has also been established typologically is that forms of similar or identical shape can and have existed side by side in languages both as finite verbs and as participles. As finite verbs, they function and have functioned without any auxiliaries or particles. As participles, they function and still

do function as parts of verbal constructions using particles and auxiliaries. In what follows, the way such forms function in both Tzeltalan and Classic Ch'olan will be examined.

4.4.2 Comparison of Typological Data with Tzeltalan and Classic Ch'olan

So far, evidence has been presented that the forms identified in the Tzeltalan and Classic Period texts as “perfect” are, instead, resultatives. This means, for example, that compared with English constructions, they are closer in meaning to statements such as “He is finished” rather than “He has finished” and, more literally, mean “He is in the state of being finished.” But when one attempts to form such sentences, for example, in English, Spanish, or other Romance languages, an auxiliary verb is almost always required. But like the examples of the Hindi aorist and the regular English past tense, the resultative constructions in Tzeltal, Tzotzil, and the Classic Ch'olan texts are finite and do not require auxiliaries. While auxiliary verbs often carry additional information such as tense and aspect that is not otherwise present, auxiliaries only occur sporadically with the Tzeltalan resultatives, and are not attested at all in Classic Ch'olan.

Instead of auxiliary verbs, Tzotzil often uses what Haviland calls temporal particles such as *xa* in this example: *Chamem xa li jtot e*. “My father has already died” (Haviland 1999:§6.1). It is difficult to provide an idiomatic translation in English that is accurate both as to meaning and form. A more literal translation would be “He is in the state of being dead already, this one, my father.” English idiomatic translations fall on both sides of this Tzotzil sentence. One could say “He is already dead,” which captures the sense of the sentence but consists of an adjective and a copula instead of an active finite verb. One could also translate, it as does Haviland in this case, as a present perfect “He has already died” which is indeed verbal but stresses the action over the result. German can get a little closer with its “Er ist gestorben,” literally “He is died” – note **not**: “He is dead” or “He has died” as one would say in English. This theoretically preserves, to a degree, the use of the verb “to be” instead of the verb “to have” as an auxiliary. It

does indeed seem to put greater stress on the resultant state without resorting to a simple adjective. However, German has only preserved this form for verbs that involve some sort of movement or change of state and otherwise uses forms of *haben*, “to have” as English now does throughout. This distinction between a verbal construction using “be” as an auxiliary and one using “be” as a copula is not easy to illustrate in English because it uses “has” instead of “is” as the auxiliary in such cases. This, in turn, tends to imply the unwanted and misleading connotations of the perfect aspect, which focuses on the action instead of the result. However, even the German still uses a participle with an auxiliary in these constructions while the resultative in Tzotzil is imparted through the use of an active, finite verb.¹⁴⁰

The equivalents of *xa*, “already” in English and “ya” in Spanish often accompany the resultative as well, but just as in Tzotzil and Tzeltal, they are only required for certain connotations and contexts. These adverbial particles do not appear to be grammaticalized since they still carry the same basic range of meanings as in other contexts. On the contrary, forms of the auxiliary verbs “have” and “haber” are required in English and Spanish, respectively, to form the perfect. Also, these lexemes do not have the same basic meaning of “possess” as they do when not functioning as auxiliaries.

In contexts in which the meaning and usage of the resultative is similar to the past perfect (pluperfect), *xa ox* occurs in Tzotzil.

'A taj ka` e, mi k'otem xa `ox ta jun `ora?

As for that horse, had it already arrived by one? (Haviland 1999:§6.1)

Still, despite the logical presence of *xa 'ox* (“already” plus “past”) in the “pluperfect” context, it is not likely that this temporal phrase indicates a grammaticalized construction either. Instead, its usage is simply adverbial, just as is *xa* in present-perfect

¹⁴⁰The more recent usage of the German perfect construction in the sense of a simple preterite does not affect the relevance of this typological evidence.

contexts. As a comparison, the *x-*, as it is used in forming the neutral aspect in *xakak'bey te caballo* "I will give you a horse" (Haviland 1988:95), is clearly grammaticalized.¹⁴¹

4.4.3 Resultatives and *ay*, "exist"

There is further evidence that what makes some sentences containing resultative forms the equivalent of English or Spanish present perfect sentences is something besides just the verb forms themselves. In his treatment of Tzeltal, Smith notes the common presence of *ay*, "to exist" in sentences containing what he sometimes calls "perfect tense" verbs.¹⁴² "It is fairly common to use **'ay with the perfect. It is often used in expressions where Spanish uses an indefinite article**" (Smith 1999:§3.5.1; emphasis added). In another section dealing specifically with the word *'ay*, Smith has the following to say about its usage with the resultative forms:

Due to its meaning of existence, 'ay changes a phrase from definite reference ("on that day") to indefinite reference ("during those days") Note [the] difference between:

mohem ta mulah te jmanwele.

Manual is riding a mule.

[Literally: "He is in the state of riding on mule, the Manuel"]

'ay mohem ta mulah te jmanwele.

Manual has ridden a mule.

[Literally: "It exists: he is in the state of riding on mule, the Manuel"]¹⁴³

(Smith 1999:§3.5.1.1; emphasis added)

¹⁴¹Grammaticalization will be discussed in more detail later and will prove to be of great importance in evaluating the verbal morphology of the Classic-Period texts.

¹⁴²*ay* is similar to the English verb "to be" in the sense of "existence" but is not used as a copula to join, for example, a subject with a predicate noun or adjective.

¹⁴³Note that although it would be much clearer in English to do so, it is not possible to say "It exists his riding . . ." since there is no ergative pronoun indicating possession in these constructions using *ay* and the intransitive resultative.

In order to establish the real difference that Smith sees between these two statements, it is important to concentrate on how he explains the difference rather than upon how he translates each of the sentences. In the first example, the message is that Manuel is or was riding (was in the state of riding) on a mule now, at this time or at the time referred to, “on that day” as Smith puts it. In the second example, the statement confirms that during a certain period of time (“during those days” or “someday”), Manuel is or was in the state of riding a mule at times, but may not be in that state at a particular time.

With the addition of *ay*, the focus is more general and not tied to a single, particular event at a particular time. There is perhaps movement of the meaning of the resultative form toward the perfect.¹⁴⁴ Instead of referring to or denoting an ongoing uninterrupted state, a passage with *ay* indicates that the state has been existing at times during the recent past [and perhaps up to the present?]. But still, the emphasis seems to be more on Manuel’s status as a rider (although not permanently so during the time-frame) and not on the action of riding as it would be if it were perfect.

Note the difference between:

mohem ta mulah te jmanwele.
“Manual is riding a mule.”

'ay mohem ta mulah te jmanwele.
“Manual has ridden a mule.”

All of these constructions are found with the transitive verb:

la yil te kihts'in te jmanwele
“Manual saw my little brother.”

'ay la yil te kihts'in te jmanwele.
“Manual once saw my little brother.”

'ay yiløj te kihts'in te jmanwele.
“Manual has seen my little brother.”

The word *'ay* is also used in the present tense:

'ay ya xbohön ta lum.
“Occasionally I go to the village.”

'ay ya jman ti'bal
“Occasionally I buy meat.”

(Adapted from Smith 1999:§3.5.1.1)

Figure 142. Use of *ay* in Tzeltal with transitive and intransitive verbs in incomplete, complete, and resultative

¹⁴⁴Nedjalkov and Jaxontov (1988:41) divide that progression into four main stages from resultative to perfect, but the stages are too generally defined to be of much practical use here. It is more important to note the actual changes in meaning or connotation and the specific characteristics retained or added.

In order to avoid a misunderstanding here, it is extremely important to note that it is **not only sentences with intransitive resultative forms** that can have *ay* added with a similar effect as the examples in Figure 142 show. Instead, Smith (1999:§3.5.1.1) also includes examples of similar constructions with *ay* for sentences containing both transitive and intransitive verbs in the incomplete, complete, and resultative. For this sentence using *ay* with the complete: '*ay moh ta mula te jmanwele*, Smith offers three possible translations "Once Manual rode a mule," "It happened that Manual rode a mule," and "Someday Manual rode a mule." This not only attests to Smith's difficulty in finding accurate translations in English (or Spanish since Smith originally wrote in Spanish), but it also emphasizes the point he wishes to make. Using *ay* with any of these aspects causes the time and place of the event to become undefined however one chooses to represent that in English or Spanish. To this extent the construction appears to resemble a kind of perfect, as indeed Smith states, but again it must be emphasized that it does not occur only with the resultative form of the verb.

Because all the sentences with *ay* in Figure 142 that use forms **other than the resultative** still carry a meaning similar to perfect tense in Spanish and English, the perfect connotation must come from a word other than *mohem*. While *mohem* provides the resultant-state element, *ay* adds the indefinite element that is typical of the perfect. This also entails that what the resultative *mohem* adds to the context is different from what *ay* adds. It is for this reason that, when Smith (1999:§3.5.1.1) is evaluating which of the forms in Figure 142 comes closest to the English and Spanish perfect he settles upon '*ay mohem ta mulah te jmanwele* as "the clearest way of declaring that 'Manual has ridden a mule.' The difference between the two sentences is that the perfect *mohem* includes a reference to the present, whereas *moh* refers exclusively to the past." Of course, he must be referring to the **present** perfect in English or Spanish. However, it is ultimately not the reference to the present that *mohem* adds, but rather the reference to an ongoing state. It is that **durative state connotation** that causes the present time to be included.

The purpose of both Smith and Haviland's grammar outlines for modern Tzeltal and Tzotzil is to provide practical grammars for students. Considering this, it is understandable that they attempt to find structures in Spanish and English that are close to what occurs in the target languages. However, they are still careful to note often that these constructions with *ay* and resultatives are "close" to the perfect and not that they are examples of the perfect aspect as such. That is why they often repeat carefully stated provisos that these forms are really not perfects, or as Smith states, "so-called perfects" as has already been illustrated in several quotes from both of their grammars.

The appearance of the *ay* constructions in Tzeltal also further attests that the intransitive resultative in *-em* is treated in the same way as other verb forms. This adds to the evidence that it, like the rest, represents an actual verbal and not a nominalized form such as a gerund or participle in these contexts. That other languages, such as members of the Ch'olan family, attest forms similar to *-em* and *-ej/-oj* as participles or that even Tzeltal and Tzotzil employ them as participles in other contexts, does not negate the legitimacy of this analysis. The Ch'olan languages later abandoned altogether the use of these suffixes as resultatives. Some have retained, for example, the *-em* participle suffix, but that does not mean that all the *-em* resultative suffixes in their ancestral language must be analyzed a participle even if the two were at one time related. Instead, the persistence of it and the other resultative suffixes in both members of the Tzeltalan family leaves the door open for their usage as resultatives in Classic Ch'olan.

Finally, this use of *ay* with various undoubtedly non-participial verb forms lessens the validity of a possible argument that the forms in *-ej/-oj* or *-om/-em* represent the use of gerunds in verbless sentences. The evidence shows instead that they can and do represent true inflected verb forms and not verbal nouns or adjectives.

Both Smith and Haviland clearly state that the resultative form resembles the perfect only in particular contexts. Besides their clear statements to that effect, examples such as those in Figure 143 leave no doubt that they can appear in sentences that are not simply the equivalent of perfect tense/aspect in Spanish and English. Although in some

cases **Haviland** makes it even clearer by adding a more literal translation **in parentheses**, **I** have also added an even more literal ones **in brackets** to some of them.

<i>Komem ta na li jluk e.</i> My sickle is in the house (Literally: It remains in the house).	(Haviland 1999:§6.1)
[It is in the state of having remained in house, the sickle.]	
<i>Lubemon ta jmek.</i> I am very [tired].	(Haviland 1999:§6.1)
[I am in the state of having become tired over time.]	
<i>Jbaik'oj pox.</i> I have bought medicine. (More accurately: I am in the state resulting from having taken medicine). - <i>bik'</i> , “take” <i>pox</i> , “shot, medicine.”	(Haviland 1999:§8.5; emphasis added)
<i>Batem.</i> He has gone.	(Haviland 1999:§6.1)
[Better: “He is gone.” and literally “He is in the state of being absent.”]	
(Adapted from Haviland 1999).	

Figure 143. Examples of sentences in Tzotzil employing resultative aspect

These examples also demonstrate that some out-of-context translations into English or Spanish perfects should not be taken as an indication that these forms themselves are perfects in Tzotzil or Tzeltal. Instead, one must rely on their more careful statements which clearly emphasize the difference between the forms and their usage in particular contexts and in translations into different languages. They are stative/resultative but can combine with various words in various contexts to form what can be translated into an English or Spanish perfect.

4.5 Transitive Resultative Suffixes and Their Look-alikes

The suffixes *-oj* and *-ej* can be used in various contexts and have various meanings or functions. Although some of them appear superficially to be the same, they may not be connected at all, either etymologically or semantically. This is a phenomenon that likely occurs in all languages and the Greater Tzeltalan language family, including

the language of the Classic-Period texts, is no exception. Of prime importance for the analysis at this point in the present study is specifically the *-Vj* group that serves as a marker for the resultative aspect. But as is often the case in analysis, suffixes or groups of suffixes that are superficially the same or similar, can be easily mistaken for each other and thereby can lead to misleading or false conclusions. For that reason, it is critical to review some of the other suffix groups that have the same general shape in the Tzeltalan languages in order to distinguish them from the transitive resultative suffixes.

First, some of the suffixes that could easily be mistaken for resultatives because of their identical or similar shape will be briefly addressed. They will be introduced but ruled out as resultatives based primarily upon Kaufman's (1971) overview of Tzeltal morphology. Then an alternative view based upon Colonial Tzeltal of what have already been interpreted here as resultative aspect suffixes will be briefly discussed. This will finally be followed by a much more detailed look at many of the same suffixes. This analysis will be based directly upon data taken from Colonial Tzotzil as represented in the Santo Domingo Zinacantán dictionary.

- 23) {*ih*₁} ‘denominative intransitivizing’ Productive
Derives iv stems from noun stems, radical and derived
Vh *iv* *ih* *oh* ∞ *ah* ∞ *eh*
 Examples:
 (a) Alloform *oh*
 k’òp ‘speech’ *k’òp oh* ‘to converse’: *k’òp on*
 (b) Alloform *ah*
 č è’b ‘two’ *č è’b ah* ‘to consider seriously: *č è’b an*
 ’èlk’ ‘theft’ *’èlk’ ah* ‘to steal’: *’èlk’ an*
 (c) Alloform *eh*
 ’ihkac ‘load’ *’ihkac eh* ‘to carry a load’: *’ihkac in*
 wàyč ‘dream’ *wàyč eh* ‘to dream’: *wàyč in*
 (d) Alloform *ih*
 nèal ‘son-in-law’ *nèal ih* ‘to become someone’s son-in-law’: *nèal in*
- (24) {*ah*₁} ‘denominative intransitivizing: absolutive’ Nonproductive
Derives iv stems from noun roots
Vh *iv* *ah* *a* (*a* before {*taY*}; *ah* elsewhere)
 Examples:
 ’àl ‘child of a woman’ *’àl ah* ‘to give birth’
 nìč’n ‘child of a man’ *nìč’n ah* ‘to beget’
 *hà’b** ‘vapor’ *hà’b ah* ‘to yawn’
 *č’à’b** ‘fasting/prayer’ *č’à’b ah* ‘to fast/pray’
- (31) {*ah*₂} ‘intransitivizer’ Nonproductive
Derives iv stems from noun roots and unique constituents
Vh *iv* *ah* ∞ *eh*
 (*eh* after {*’à’bat*} ‘service’, *e* before {*taY*} {*tes*}, *ah* elsewhere)
 Examples:
 (a) from N roots
 ’à’t ‘service’ *’à’t eh* ‘to work’
 mèba’ ‘orphan’ *mèba’ ah* ‘to be lonesome’
 (b) from unique constituent
 *wì’n** ‘hunger’ *wì’n ah* ‘to be hungry’
 (Adapted from Kaufman 1971:54-57)

Figure 144. Intransitive verbs derived from nouns by *-Vj* suffixes in Tzeltal

(26) {*ih*₂} ‘deadjectival intransitivizer: ingressive Nonproductive

Derives *iv* stems from adjective roots

Vh *iv* *ih* ∞ *ah* ∞ *eh*; *i* ∞ *a* ∞ ∅

ah occurs with a few roots: {*hàl*} {*tàk*’} {*yàn*} {*čikān*}

ih with the remaining monosyllabic roots

eh with the remaining disyllabic roots

a, *i*, ∅ occur respectively before {*tes*}

Examples:

(a) with *ah*

<i>hàl</i>	‘enduring’	<i>hàl ah</i>	‘to endure’
<i>tà’</i>	‘ripe’	<i>tà’ ah</i>	‘to ripen’

(b) with *ih*

<i>tàk</i>	‘dry’	<i>tàk ih</i>	‘to dry up’
<i>’ùc</i>	‘good’	<i>’ùc ih</i>	‘to improve’

(c) with *eh*

<i>tùlan</i>	‘strong’	<i>tùlan eh</i>	‘to get strong’
<i>’àlan</i>	‘low’	<i>’àlan eh</i>	‘to endure’

(Adapted from Kaufman 1971:55-56)

Figure 145. Intransitive verbs derived from adjectives by *-Vj* suffixes in Tzeltal

4.5.1 Derivation of Intransitives from Nouns and Adjectives by Suffixes in *-Vj*

One of the largest groups of *-Vj* suffixes consists of several sets that derive intransitive verbs from nouns and adjectives. Examples of these, as they are attested in Tzeltal and analyzed by Kaufman (1971), *-Vh* suffixes in his orthography, are shown in Figure 144 and Figure 145. These sets could be misleading when examining the transitive resultative suffixes since both *-oj* and *-ej* are included in the overall group. Kaufman reconstructs similar derivational suffixes for Proto-Tzeltal-Tzotzil as well as shown in Figure 146. As these reconstructions suggest,

A21	*-aj	vi < N (productivo)
A22	*-aj ∞ ij	vi < A (improductivo)
A23	*-ej ∞ aj	vi < algunas raíces (improductivo)
(Adapted from Kaufman 1972:141-142)		

Figure 146. Suffixes that derive intransitive verbs from nouns and adjectives reconstructed for Proto-Tzeltal-Tzotzil

reflexes of these derivational suffixes are attested in Tzotzil as well. For example Haviland (1988:85) describes a *-Vj* suffix in Colonial Tzotzil that derives “an intransitive action associated with a nominal root.” This appears to correspond directly to Kaufman’s number (23) included in Figure 144. Tzotzil, including Colonial Tzotzil, also employs a set of suffixes that derive intransitives from adjectives. The Santo Domingo Zinacantán Tzotzil dictionary (Laughlin 1988) attests *halaj*, *ta’aj*, *takij*, and *yanij* (instead of *yanaj* for Tzeltal). These are all included as well in the Tzeltal examples shown in Figure 145 which outlines what Kaufman labels a “deadjectival intransitivizer.” This group of suffixes as they are attested in Colonial Tzotzil will be examined in greater detail below in Section 4.6.1.

More recently, Kaufman (pers. com. 2003) has cautioned that although the analysis of these sets is technically correct, it likely represents a slight oversimplification. What may be occurring in the case of some of these derived intransitives in *-Vj* entails a two-step process. The vowel of the suffix may actually serve the purpose of deriving a transitive verb from a noun or adjective with the final *-j* representing perhaps an antipassive. For example, starting with *k’op* “word” or “speech,” *k’opo* would represent a transitive verb “to speak” and *k’opoj* an antipassive, and so a derived intransitive verb with the meaning “to converse.” Nevertheless, whether one analyses these at the level provided by Haviland and the earlier Kaufman or at the deeper, more-explicit level suggested by the later Kaufman, this set of suffixes clearly represent something quite different from those used for transitive resultative forms.

One of the more obvious differences between this set and the transitive resultative set is that, semantically and in context, it derives intransitive verbs instead of inflecting for resultative aspect. This might increase the danger of their being analyzed instead as a sign that the transitive resultative suffix has spread to intransitive verbs. There is clearly no evidence at all of this ever happening in any of the Tzeltalan or Ch’olan languages including Classic Ch’olan, as will be argued later. The two *-Vj* groups involved are quite separate in function. What is more, they do not even formally share the same set

members. The transitive resultative group, unlike the intransitive derivational group, employs only *-oj* and *-ej* in Tzeltal and Colonial Tzotzil and only *-oj* in Modern Tzotzil. Most important, the resultative groups of suffixes do not cross the boundary lines between intransitive and transitive roots and stems. In this, they are like most if not all of the derivational and inflectional suffixes in the Greater Tzeltalan language family.

Another critical characteristic of the intransitive derivational set that differentiates it from the transitive resultative set is that the choice of using *-oj* or *-ej* (or any of the other members of the set) is not clearly determined by the syllabic length or derivational status of its stem. In other words, the choice among which of the *-Vj* suffixes to use is not determined by the number of syllables in either the stem or the complete form. Such characteristics do determine the choice of *-oj* versus *-ej* for the transitive resultative in Colonial Tzotzil. The importance of paying attention to differences such as these cannot be overemphasized since they are often among the critical characteristics that help to differentiate these sets of similarly-shaped members in the first place. It is also important to realize that these differences must be synchronically determined. Suffixes with similar shapes may sometimes share a common ancestry, but for speakers inhabiting the same synchronic linguistic milieu, the diachronic relationship may be completely opaque and, at any rate, is not necessary for contemporary understanding or usage.

(57)	{ <i>eh</i> ₁ }	‘verbal noun’	Productive	
	Derives verbal nouns from all iv stems in {<i>awan</i>}			
	<i>Vh</i>	<i>n</i>	<i>eh</i>	
	Examples:			
	<i>tàk' uY (a)wan</i>	‘to advise’	<i>tàk' uY (a)wan eh</i>	‘advice’
	<i>mìl (a)wan</i>	‘to kill’	<i>mìl (a)wan eh</i>	‘slaughter’
	<i>kòl taY (a)wan</i>	‘to save’	<i>kòl taY (a)wan eh</i>	‘salvation’
(67)	{ <i>leh</i> }	‘verbal noun’	Productive	
	Derives noun stems from Positional roots			
	<i>VI aj + Vh</i>	<i>n</i>	<i>leh</i>	
	Examples:			
	<i>kùš</i>	P	‘alive’	<i>kùš leh</i> ‘life’
	<i>tèn</i>	P	‘pressed flat’	<i>tèn leh</i> ‘field’
	<i>lòm</i>	P	‘hollow’	<i>lòm leh</i> ‘valley’
(Adapted from Kaufman 1971:69, 73)				

Figure 147. Nouns derived from intransitive and positional adjectival stems by *-ej* suffixes in Tzeltal

4.5.2 Nouns Derived by *-Vj* Suffixes

4.5.2.1 Nouns Derived by *-Vj* Suffixes from Intransitive and Positional Roots

Figure 147 shows two types of verbal noun derivation using an *-ej* suffix. Unlike the derivational suffixes reviewed in the previous section, these two suffixes are very specific both as to form, only *-ej*, and as to stems. The first, numbered (57) by Kaufman, presents a suffix that derives nouns from antipassives in *-awan* and *-wan*. This suffix will prove to be important in our later more detailed discussion of Colonial Tzotzil forms not only for its role as a nominalizer but also for its role as a stem for agentive constructions.

The second *-ej* suffix in Figure 147, Kaufman’s number (67), is also quite specialized. It is added to adjectival forms of positionals in *-VI* to form new nouns, semantically related but nevertheless with a different meaning. In forming the compound suffix, the vowel of the *-VI* adjectival suffix is elided. The tangible or abstract object it refers to has some of the characteristics associated with the positional adjective from

which it is derived. Thus in one of the examples given by Kaufman, *tèn* means “pressed flat” while *tènlej* means “field” which is a flat thing.

(61) {*eh*} ‘verbal noun’ Nonproductive

Derives noun stems from tv stems, radical or derived

Vh *n* *eh* ∞ *oh*

eh with {*cè*} ‘to laugh’, {’*à*’*biy*} ‘to hear’, {*hù*} {*n*} ‘to grind corn’

oh with {*k’ay*} ‘to sing’, {*k’àh*} ‘to harvest’

Examples:

<i>k’ày</i> *	T ‘to sing’	<i>k’ay oh</i>	‘song’ :	<i>h_Λ k’ày oh</i>	‘singer’
<i>k’àh</i>	T ‘to harvest’	<i>k’àh oh</i>	‘harvest’ :	<i>h_Λ k’àh oh</i>	‘harvester’
<i>cè</i> *	T ‘to laugh’	<i>cè’ eh</i>	‘laughter’		
’ <i>à</i> ’ <i>biy</i>	T ‘to hear’	’ <i>à</i> ’ <i>biy eh</i>	‘conversation’		
<i>hù’ n</i>	tv ‘to grind corn’	<i>hù’ n eh</i>	‘grinding corn’		

(Adapted from Kaufman 1971:71)

Figure 148. Verbal nouns derived from transitive stems by *-ej* and *-oj*

4.5.2.2 Nouns Derived by *-Vj* Suffixes from Transitive Stems

In his overview of Tzeltal derivational suffixes, Kaufman includes a set that contains both *-ej* (*-eh*) and *-oj* (*-oh*). Kaufman (1971:71) analyzes this set, as attested in Tzeltal, as a non-productive group of forms in *-ej* (*-eh*) with an *-oj* (*-oh*) alloform as shown in Figure 148. One of the differences from the previous more productive *-Vj* nominalizer sets is that this one nominalizes transitive instead of intransitive stems. However, its applicability in modern Tzeltal seems quite limited. What is more, even the roots of two of the words, *k’ay** and *tze** are actually no longer attested in Tzeltal. Neither exists as a transitive verb root in Tzeltal and had to be reconstructed by Kaufman as indicated by the asterisk (*). Nor do they exist as roots even in Colonial Tzotzil. The forms actually attested are instead non-CVC transitives, intransitives, and nouns in both languages. In both the Yukatekan and Ch’olan language families as well as in others in which the root is actually attested, the reflexes of the root *k’ay* can mean either “song” or “to sing” (Kaufman 2003:749) and the root *tze*’ is usually a noun meaning “laughter” (“risa”) (Kaufman 2003:784). It is not clear if the uncertainty concerning the root status

of these two words is significant here. Perhaps it attests mainly to the unproductivity of these suffixes in forming the derivations. Their use on these particular roots may hearken back to a time when the stems were more like the reconstructed roots. What is important for the present purposes, however, is that the alternation between *-ej* and *-oj* in this group, small as it is, does not seem to be dependent upon its status as a CVC, derived, or multisyllabic root, as do the transitive resultative suffixes in Tzeltal and Colonial Tzotzil. That alone provides some evidence against the identity of this group with the transitive resultatives.

The word *a'b'iy* (*a'i* in Tzotzil) represents an irregular verb that, considering its form, may have been derived as a verb by the /i/ suffix in both Tzeltal and Tzotzil. So, for what it is worth in this context, it is not likely a CVC root. Overall, Kaufman (2003:210) notes that “multiple reconstructions” are possible for it in Proto-Mayan. *Ju'* (*ghu*) and *juy* (*ghuy*) are attested in both Colonial Tzeltal (de Ara 1986:296) and Colonial Tzotzil (Laughlin 1988:215). Among the meanings in Colonial Tzeltal are “encalar” (“to lime”) “refregar” (“rub”) and in Colonial Tzotzil “crumble with one’s hands” and “stir.”¹⁴⁵ In either case, its shape is likely CVC, and so it too takes the unexpected *-ej* suffix instead of the usual *-oj* in both Tzotzil and Tzeltal. *K'aj* is present in both languages and for the most part represents a transitive root although Modern Tzotzil has *k'aj* as an intransitive verb meaning “be harvested” (Laughlin 1975:184).

These examples may be signs that, just as in Tzotzil, the *-oj* nominalizing suffix was losing ground to the *-ej* form of this now unproductive set. There is no evidence of this happening in the transitive resultative set. Instead, although only in Tzotzil, the *-oj* form takes over from *-ej* in the transitive resultative set, even on derived transitive verbs.

¹⁴⁵Tzotzil, *juch'* is a root meaning “grind” (“moler”). What is more, *juch'neh* is listed by Laughlin (1975:160) for Tzotzil as a derived noun meaning “grinding,” just as is *hu'neh* by Kaufman for Tzeltal. *Juch'* is also a transitive verb meaning “to grind” in Bachajón Tzeltal (cf. Slocum et al 1999:61). It does not appear to fit the criteria for being a transitive resultative either.

In sum, this set of suffixes in Tzeltal clearly does not provide sufficient evidence to support an analysis of its actual synchronic involvement in forming transitive resultatives. This is true whether or not MacLeod is right that nominalizations such as these may have served at one time as the source of the transitive resultative *-oj* and *-ej* suffixes.

4.5.2.3 Clues from Tzotzil on Fate of Nouns Derived by *-Vj* from Transitives in Tzeltal

Although Kaufman does reconstruct a set in *-ej* and *-oj* that derives nouns from certain roots (as noted in Figure 146) which probably includes the transitives in Figure 148, he also notes in each case that this set is unproductive. There is evidence, however, in both the Tzeltal and Tzotzil languages that this was not the case at all in Pre-Colonial times. This evidence is more extensive in Colonial Tzotzil than it is in Tzeltal. For that reason, the Colonial Tzotzil data will be examined separately in Section 4.6. Although the brief comments here will themselves become clearer after that in-depth look at Colonial Tzotzil, a few preliminary remarks concerning it should to help shed some light on the history of both the *-Vj* nominalizer and *-Vj* resultative sets and how they changed over time.

Very important for the present purposes is a derivational suffix *-ej* that is noted by Haviland for Colonial Tzotzil. Although it too may be confused with similar resultative and intransitivizing suffixes, it is neither. Haviland (1988:86) characterizes it in this way: “*-ej*. doing whatever action the verb denotes. “*malay* ‘wait’ [for (something)] > *malayej* ‘waiting for (something)’.”¹⁴⁶

¹⁴⁶Note that likely through an oversight or typing error, Haviland has “*malay* ‘wait’” instead of “wait for.” There is no doubt, however, that he analyzed *mal-ay* as a derived transitive verb derived by *-ay* from a nominal root *mal*. What is more, his definition of the derived nominal does indicate an original transitive stem insofar as it includes “for (something).” Finally, the *-ay* suffix on *malay* also indicates a derived transitive verb.

Stated more explicitly, this particular suffix derives gerunds and participles from transitive verbs. Other than in its formal shape, it is not likely the same suffix that derives nouns or verbal nouns from certain specific intransitive stems such as antipassives in *(a)wan* or positional roots shown in Figure 147. Also, although it appears on derived or multi-syllabled stems in Colonial Tzotzil as does the *-ej* of the resultative, it is not the same suffix, a difference that in Tzotzil is backed by diachronic evidence.

The historical changes that took place between the Colonial Tzotzil of Santo Domingo Zinacantán and the Modern Tzotzil of San Lorenzo Zinacantán provide convincing evidence that the two were treated as separate suffixes. This *-ej* nominalizer still persists in Modern Tzotzil as a “nominalizer of polysyllabic verbs exclusive of affective verbs” (Laughlin 1975:25). That means that despite the passage of time, this particular *-ej* suffix still has basically the same function, albeit with a somewhat different set of hosts. The *-ej* marker of transitive resultatives for polysyllabic verbs, however, has disappeared from Modern Zinacantán Tzotzil. Instead, the scope of the *-oj* transitive resultative suffix has expanded to take in multisyllabic derived stems as well as monosyllabic verb roots. In a further demonstration of their independent histories, the *-ej* nominalizer now shares duties with an *-el* nominalizer that is used with the same function on monosyllabic and affective verbs.¹⁴⁷

Whether the virtual disappearance of the *-ej* resultative suffix and the introduction of the *-el* nominalizer for CVC root and affective verbs was driven by phonetic, semantic, or other causes is difficult to say. If one wished to speculate, a straightforward scenario might see both as a move toward clarity and prevention of confusion. These two changes, the supplanting of *-oj* as a nominalizer for root transitives and the takeover of the multisyllabic *-ej* resultative inflection by *-oj* would indeed have lessened the chance of confusion between the two previously formally identical sets of suffixes. Of course, this

¹⁴⁷ As we shall soon see, the *-el* nominalizer pushed out an *-oj* nominalizer that was used to derive verbal nouns from monosyllabic (CVC) roots in Colonial Tzotzil. The suffix *-oj* is no longer productive in that capacity.

particular change took place only in Tzotzil and not in Tzeltal which preserved the *-oj* and *-ej* for use with CVC and derived transitive resultatives respectively.

There was, however, a significant change that did affect the *-oj/-ej* set that formerly derived verbal nouns from transitive verbs. It involved a change from *-oj* to *-ojel* as the derivational suffix used to derive nouns from transitive stems. It will be discussed in Section 4.5.2.5. There it will become apparent that in Tzeltal too, that independent changes **in one of the sets and not the other** will provide further evidence within the same language family that the two sets were distinguished from each other by the speaking community. At the very minimum, at the time and place these changes took place, the two sets were synchronically independent of each other and with those changes in place have continued to be so. Given the different diachronic developments of each set of suffixes and the synchronic differences in both application or meaning, equating the two cannot be justified.

4.5.2.4 Similar Sets of *-Vj* Suffixes in Tojolab'al

Tojolab'al shares a number of derivational and inflectional suffixes with Tzeltalan. Although only playing a supportive role here, evidence from Tojolab'al helps to strengthen the conclusion that the set of nominalizing suffixes is not the same as the set used for transitive resultative inflection. The suffixes *-unej* and *-nej* appear in Tojolab'al as what Furbee-Losee (1976:134) calls “perfective” inflection and which has been called “resultative” inflection in this study.¹⁴⁸

¹⁴⁸Needless to say, I do not think that the *-unej/-nej* resultative suffix in Tojolab'al is equivalent to the *-nej* of *ju'nej* or *Juch'nej* as evidenced in Tzeltal and Tzotzil.

oh. oh derives noun stems from transitive verb and unique constituent roots.

<u>7i7-oh</u>	n	"possession"
<u>7i7</u>	TV	"to take something"
<u>čiw-oh</u>	n	"tarantula"
<u>čiw</u>	TV	"to carry a large, round burden"
<u>c'eb'-oh</u>	n	"song"
<u>c'eb'</u>	UC	"sing"

ul-eh₂. The desinence ul-eh₂, often meaning "___ing," derives noun stems from transitive verb and particle roots. ul-eh₂ is a productive desinence.

<u>cih-ul-eh₂</u>	n	"dusting"
<u>cih</u>	TV	"to dust something"
<u>b'is-ul-eh₂</u>	n	"measurement"
<u>b'is</u>	TV	"to measure something"
<u>sik'-ul-eh₂</u>	n	"sniff"
<u>sik'</u>	TV	"to smell something"
<u>7il-ul-eh₂</u>	n	"that thing over here"
<u>7il</u>	PART	"that"
<u>7it-ul-eh₂</u>	n	"this thing over here"
<u>7it</u>	PART	"this"

(Furbee-Losee 1976:87, 90)

Figure 149. Nouns derived from transitive verbs by *-oj* and *-ej* in Tojolab'al

This is likely a borrowing with some changes of the *-ej* resultative suffix that occurs on derived transitives in Tzeltal and Colonial Tzotzil. Despite this, Tojolab'al also attests a group of words that are likely related to the *-oj* nominalizers from the set listed by Kaufman in Figure 148. Figure 149 includes the three examples Furbee-Losee (1976:87) provides for the derivational suffix *-oj* which "derives noun stems from transitive verb and unique constituent roots."

As can be seen, one of the three examples is *k'eb'* (*c'eb'* in Furbee Losee's orthography), a unique constituent (uc) meaning "sing" with the ensuing stem *k'eb'oj* being a noun with the meaning "song." This directly parallels the derivational set listed by Kaufman and includes the Tojolab'al equivalent of Tzeltal *k'ayoj*. But in the case of

Tojolab'al, a suffix of the shape *-oj* is not used at all for marking transitive resultatives. There is, however, a suffix in *-ej* which when combined with *-ul* forms a suffix in *-ulej* that derives gerunds and other nouns from transitive stems as shown in Figure 149. What happened in Tojolab'al to the resultative suffixes seems to be the opposite of what happened in Tzotzil. The suffix in *-ej*, as reflected in *-nej*, remains as part of the resultative suffix instead of *-oj* as in Tzotzil. The suffix in *-oj* does derive some nominals from verbs although it is possible that this suffix may be unproductive as it is in Tzeltal. At any rate, in Tojolab'al as in Tzeltal and Tzotzil, it is unlikely that these two sets of suffixes are overtly or actively related from a synchronic point of view.

(63) {*ohel*} verbal noun' Fairly productive

Derives noun stems from T roots

Vh n + *VI* n *ohel*

Examples:

<i>k'àn</i> T	‘to ask for’	<i>k'àn ohel</i>	‘petition’	<i>h- k'àn ohel</i>	‘begger’
<i>nòp</i> T	‘to consider’	<i>nòp ohel</i>	‘study’	<i>h- nòp ohel</i>	‘student’

(Adapted from Kaufman 1971:72)

(Adapted from Kaufman 1971:72)

Figure 150. Verbal nouns derived from transitive roots by *-ojel*

4.5.2.5 Derivational Compound Suffix *-ojel* in Tzeltal

It is important at this point to address another Tzeltal suffix *-ojel* mentioned briefly earlier (Section 4.5.2.3). As is almost always the case with suffixes of more than one syllable, what seems at first to represent one suffix can, when examined in detail, be broken down into two or more elements at least from a diachronic perspective. Based upon shape alone, the first part of this suffix *-oj* could represent several different morphemes. From a solely formal perspective, among those that have already been discussed, it could be an *-oj* suffix that derives intransitive verbs from nouns or adjectives, a status marker for transitive resultatives, or a suffix that derives nominals from transitive verbs. In the group referred to in Figure 150, the roots are transitive verbs

and not nouns. That rules out the first option. The second option is transitive resultative verb inflection. Because inflectional aspectual morphemes are not derivational and because inflectional markers are not likely to permit service as a stem for derivational suffixes, it also cannot be transitive resultative verb inflection.¹⁴⁹ Of the three, this leaves only the last option, that *-oj* is a nominalizer here, and that is how it is described by Kaufman (1971:72) for the Tzeltal examples shown in Figure 150.

Suffixes in *-Vjel* that are superficially open to varying interpretations in Colonial Tzotzil will be examined later. They are important to address because they are also present in the Ch'olan languages and have also been suggested as possible remnants of resultative (“perfect”) suffixes in those languages. That claim will be addressed later. Constructions such as these in *-Vjel* have also become important because they represent the focal point for two different views of how to interpret the related forms in the Classic Inscriptions which in this current study have been classified as transitive resultatives. For that reason, they and their different interpretations will be discussed next.

Before doing so, one further comment on the Tzeltal suffix shown in Figure 150 will also prove quite relevant in the discussion that follows. It has been just noted above in Section 4.5.2.3, that the *-el* nominalizer for CVC root and affective verbs displaced the former *-oj* nominalizer for transitive verbs in Modern Tzotzil. This *-ojel* suffix in Modern Tzeltal performs the same function as that of the *-el* suffix alone in Modern Tzotzil. In other words, instead of displacing the *-oj* nominalizer of transitives as *-el* did in Tzotzil, Tzeltal instead simply added it to the end of the old *-oj* nominalizer. It had apparently lost its capability to perform the derivational nominalization function on its own, just as *-oj* did in Tzotzil, but Tzeltal compensated for this loss of function in a slightly different way.

¹⁴⁹ Although there have been attempts recently by some linguists to minimize or do away with the validity of distinctions between inflectional and derivational morphemes, these attempts are not likely to succeed and may be overemphasizing the lack of absolute adherence to every possible criterion used to distinguish them. In the end, this distinction is very reliable based upon a number of shared characteristics including the one referred to here (cf. for example, Cárdenas 2004).

4.5.2.6 Some *-ojel* Suffixes in Tzeltal and *ji-ya* Glyphic Suffix in Classic Ch'olan

Robertson et al. (2004:284-287) have suggested that the **-ji-ya** glyphic combinations on a set of derived transitive verbs in the Classic texts (as shown in Figure 134 and Figure 135) represent two nominalized antipassive markers. They explain it in this way:

It is also possible that these “secondary expressions” are nominalized antipassives (NAPs), suffixed at first only with *-ij*, spelled with a morphosyllable, **-IJ**, and later augmented by *-ya*, spelled with the syllable **ya**. (Robertson et al. 2004:284)

Their “seeing the *ih*, *ya*, or *ih-ya* morphemes as NAPs” (Robertson et al. 2004:286) or (N)ominalized (A)nti-(P)assives (NAPs) provides them with a simple answer as to why, in their opinion, the forms **'u-KAB'-ji**, **'u-KAB'-ya**, and **'u-KAB'-ji-ya**, all have precisely the same meaning and interpretation as nominalized antipassive forms.¹⁵⁰ Instead there is evidence that all three of these forms are quite distinct and equating them represents an oversimplification of the diverse possibilities of expression present in the Classic texts.

They further note that “root transitives in Tzendal [sic] (Colonial Tzeltal) commonly take *-ogh-el* . . . as their NAP endings” and that “the derived transitives use *-egh*” (e.g., *atay-egh*, ‘counter’, *olantase-egh*, ‘waiter’, *ulesa-egh*, ‘founder’, Ara 1571)” (Robertson et al. 2004:285). Their line of reasoning continues along lines similar to these. If one changes the latter suffix to account for the Ch'olan sound change from /e/ to /i/ and if one modifies the Colonial Spanish orthography, the suffix would be *-ij* (or *-iij*).

¹⁵⁰Of course, these constructions, although transliterated in the same way, have been transcribed differently here in this study: **'u-KAB'-ji ukab 'iij**, **'u-KAB'-ya ukab 'iiy**, and **'u-KAB'-ji-ya ukab 'jiy**

This is indeed precisely what one would transcribe for the suffix in the transliteration **u-KAB'-ji** following broadly accepted rules for transcription.

However, even their list from Ara's Tzeltal ([1571] 1986) fails to present any antipassive forms despite their interpretation of them as such. First, they fail to mention that the examples they bring are preceded by a "*gh*." in the original dictionary. This means that in actual use these forms are prefixed by *gh*- the equivalent of *j*- in the orthography being used here, in order to get the meaning that Robertson et al. provide. Thus *ghatayegh* (*jateyej*) but not *atayegh* (*atayej*) alone is "contador" ("counter") (Ara 1986:6v). The entry for *atayegh* (*atayej*) without the *gh*- (*j*-) is given the meaning "contado" ("counted") instead by Ara just 5 lines below it. But there is no antipassive required to get from *atay* "contar" ("to count") to *atayej* "contado" ("counted"). All that is needed is a nominalizer in *-ej* and that is clearly at hand in Colonial Tzeltal. What brings one from "counted" to "counter" is not an antipassive or a single or compound "NAP," but **rather a *j*- agentive prefix**. This agentive prefix is the equivalent of "one who does . . ." whatever the noun or verbal noun refers to. That this *-Vj* nominalizer, whether *-oj* or *-ej*, is more common and productive in Colonial Tzeltal and Colonial Tzotzil than in their modern counterparts is a different issue. All of these forms, insofar as they have reflexes in Colonial Tzotzil will be revisited in the following sections.

MacLeod has instead proposed that while the **ji** in **u-KAB'-ji** is writing glyphically the transitive "perfect" (my "resultative" or "stative") suffix *-VVj*, the *-egh* (*-ej*) and *-ogh* (*-oj*) in *vetoghel* (*vetojel*) and *olantesegh* (*olantesej*) are writing instead two forms of a "perfect" gerund. In effect, for her, both the active transitive "perfect," and the "perfect" gerund were based upon an earlier participle.

The *-oh* (*-oj* as demonstrated in the colonial language, which had the /h/j/ contrast) and *-ej* above reflect, according to Kaufman, a perfect-status inflected-stem innovation shared by Tzeltalan and Tojolab'al that was based upon an

antecedent perfect participle/gerund which was itself a reflex of the proto-Mayan perfect participle *-o-ej/-ej* (MacLeod 2004:314).

MacLeod's view that the specific suffixes in question here are not antipassive nominalizers, albeit nominalizers nevertheless, is by far the most likely analysis. In sum, she describes the following scenario:

Greater Tzeltalan had perfect participle gerund forms *-o-ej/-ej* and from them innovated the perfect active forms while keeping the gerund forms (as for a time, the participles . . .). For root transitives, *-ej* assimilated to the antecedent vowel with concomitant lengthening, yielding *-ooj* after *-o*. . . . Because Tzeltalan derived transitives end in consonants . . . , *ej* remained *ej*. . . . In Proto-Ch'olan, unmarked derived transitive stems did not end in consonants. Since greater Tzeltalan *-o-ej* was realized as *-ooj* (and eventually as *-oj*) (Kaufman 1989, and his personal communication, 2000), it is likely that Classic Ch'olan *-V-ej* was realized as *-VVj* and eventually *-Vj*, . . . (MacLeod 2004:316)¹⁵¹

To be sure, as noted by Robertson et al., there are nominalizers that are attached to antipassive stems as well as to other intransitive stems in Tzeltalan as we have already noted above. It is also true that many of these forms are then used in agentive constructions as they also mention. But as Robertson et al. (2004:285) stress, it is not only *-oj* and *-ej* that derive these nominals. "We also note that while *-egh [-ej]* is the

¹⁵¹It should be noted that even if one does not accept one of the currently widely held views among epigraphers that long or complex vowels were represented in the hieroglyphic script, this scenario is still valid with the difference that the vowels actually represented and written were no longer long or complex by Classic Period times. Also, there may be other possible ways to explain the development of the *-VVj* or *-Vj* transitive resultative suffix although MacLeod's theory seems to be the most likely. For example, the suffix could have started as *-VVj* and then through leveling have later become *-oj* or, because of the additional length of the stem, *-ej* for derived transitives in Tzeltalan. This would seem to fit in better with the eventual loss of *-ej* altogether leaving only *-oj* since the latter change would not have had to assume the effect of the presence of stem-final vowels or consonants. It would also not require the assumption of long vowels in the suffixes in Classic Ch'olan.

most common NAP, other forms ending in *gh* [j] are not far to seek. Consider, for example, *gh-munal-aghel*, *mun-ighel* ‘tributario’; *gh-meba-aghel* ‘triste’.” Using the ALMG orthography these would be *jmunalajel*, *munijel*, and *jmeb’ajel*. However, instead of strengthening their case, this state of affairs actually weakens it. These are not transitive roots or stems at all but rather nominal stems derived as intransitive verbs by *-Vj* (as seen in Figure 144) and then nominalized by *-el*.

While more work needs to be done in both Tzeltal and Tzotzil to delineate precisely how the *-Vj* nominalizers function in each case, they clearly do not function in the same way as do the transitive resultative suffixes *-oj* and *-ej*. The latter inflect transitive verbs to form active, finite transitive resultatives, while the former represent several different sets of derivational suffixes, each functioning to derive nouns from various roots and stems. In Tzeltal, the set that derives nouns from transitive stems and roots includes *-oj* and *-ej*. Although different vowels also occur on transitive resultatives in Classic Ch’olan, they should not occur on Tzeltal or Tzotzil transitive resultative contexts if MacLeod’s reconstruction is right – and indeed they do not.

If one compares some entries from the Colonial dictionary of Santo Domingo Zinacantán to the examples that Robertson et al. describe as being suffixed by antipassive endings, one finds that some other interpretations provide a more straightforward insight into their function. *Olanter* in Tzeltal is matched by the derived transitive *’alantes* in Tzotzil meaning “deprive, humble, overmatch, subject (Laughlin 1988:154). *Olantesej* in Tzeltal matches the derived transitive *’alantesej* in Tzotzil. This is the same suffix we have discussed before and whose interpretation Haviland (1988:86) summarized as “doing whatever the verb denotes.” Thus *’alantesej* means “subjection.” So the suffix *-ej* in this case is clearly a nominalizer since the result is a verbal noun. What remains to be decided is whether it is also an antipassive. If Haviland’s example is correct, it is not. He expresses the resultant meaning of *malayej* as “waiting for (something),” that is, as a noun derived from a derived transitive verb *malay* (*mal-ay*) “wait for” which takes an object and not from an antipassive “wait” without one. This is reinforced in Tzotzil by

the presence of the parallel form *'alantasel* which is also constructed of the same derived transitive stem but with the nominalizer *-el* instead.

It is not clear to me whether Robertson et al. (2004:285) also classify *-el* as an NAP suffix or just as one of the suffixes that can attach to NAP markers because of their “tendency to append suffixes” as in “Tzendal *-ogh-el/-agh-el [-oj-el/-aj-el]*.” At any rate, *-el* can hardly be classified as an antipassivizer in Tzeltal or Tzotzil. Its parallel usage in the *'alantasej* / *'alantasel* examples would seem to require both to have the same effect in this particular case. I believe that *-ej* and *-el* are both nominalizers here but not antipassivizers. Needless to say, neither is *-ej* a transitive resultative suffix in this context. Although the Santo Domingo Zinacantán dictionary does not have an entry for either of these two nominalized verb forms used as a stem for agentives, both are capable of being used in this way as attested by other causative examples such as *j'otesej Han ta tak'in* “printer” (literally, “one who puts paper into the metal”).

Robertson et al.’s and MacLeod’s arguments for and against their analysis and interpretation of “secondary verbs” in the Classic inscriptions have stressed the importance of interpreting verbal and nominal suffixes of the shape *-Vj* and *-Vjel* in Tzeltalan. There is little doubt that antipassive suffixes (or at least derived intransitives) in *-Vj* exist both in the Tzeltalan languages and in the Classic Period texts. However, it is important that care is taken to distinguish all of the similar or even formally identical suffixes to ascertain precisely the role that such suffixes are playing in different contexts. For our purposes here, it is also important to detect how to distinguish among those suffixes and how they relate, if at all, to what has been called here the “resultative” set attested in Tzeltal, Tzotzil and Classic Ch’olan. Robertson et al. have stressed mainly data from Tzeltal. MacLeod also did not review the data from Tzotzil concerning the presence of suffixes such as *-oj-el* on verbs to form gerunds (cf. MacLeod 2004:319). To fill that gap, I will present and analyze data from Tzotzil, mainly that contained in *The Great Tzotzil Dictionary of Santo Domingo Zinacantán*.

4.6 Analysis of *-oj* and *-ej* suffixes in Colonial Tzotzil

We have already noted some of the roles the suffixes of the shape *-Vj* and *-Vjel* play, especially in Tzeltal, and have included the analysis of some of them as presented by Terry Kaufman. When addressing the various Tzotzil groups of suffixes, the comparable Tzeltal groups will not always be explicitly addressed, but matching them with each other should be straightforward. For example, the first group we will examine is related to the Tzeltal group of suffixes shown in Figure 145.

The lexical members of the various groups included in what follows have been selected based upon being attested with roots or stems matching the specific criteria in the Santo Domingo Zinacantán dictionary. They have usually been categorized as such by Laughlin based upon information from the dictionary. Of course, a critical selection criterion was their being attested in that dictionary with a form of one of the *-Vj* suffixes. In the original Santo Domingo Zinacantán dictionary, the root or stem class was most often marked by aspect affixes and by the first and second person singular ergative and absolutive dependent person markers depending upon which were applicable. Not only verbs but also verbal nouns were marked in this way.

To avoid confusion, the figures will use Laughlin's orthographical format and analysis rather than that of the original Colonial dictionary. Laughlin presents his analysis of the roots or stems along with his interpretation of their status. Since the discussion so far has been concerned with nominalizations, an attempt will be made to also include examples for which nominalizing suffixes such as *-Vjel* or *-wanej* were attested. Forms other than the roots or stems and the forms in *-Vj* have been included in the figures as well, especially when they provide additional clues as to the analysis of the root or the *-Vy* forms that are suffixed to them.

<i>hal</i>	aj	lasting
<i>halej</i>	iv	be greatly detained in talking or walking, delay, last, be long-winded, stay, succeed
<i>halejel</i>	vn5	delay, duration, perpetuity
<i>komkom</i>	aj	short, small
<i>komoj</i>	iv	become short (corto hacerse)
<i>komojel 'u</i>	nphr(vn4f of n5).	waning of moon
<i>laan</i>	aj	mildly (cure, rule, punish), soft, tame, temperate (climate), tame, tender, very tender.
<i>laanej</i>	iv	be calm, merciful, or pacified, become tame, rest (patient)
<i>laanejel</i>	vn5	clemency

(Adapted from Laughlin 1988)

Figure 151. Colonial Tzotzil Versives (Inchoatives) in *-Vj* derived from adjectives

4.6.1 Inchoatives in *-Vj* Derived from Adjectives

The examples of intransitive verbs shown in Figure 151 are derived from adjectival stems by the suffix *-Vj*. The verbs derived in this way from adjectives are inchoatives, also known as “ingressives” or “versives.” The terms “inchoative” and “ingressive” refer mainly to the beginning of an action, state, or event. But as Laughlin’s translations indicate, these forms seem to refer to the whole process of becoming rather than just the beginning of it. Thus the adjective *kom* or *komkom* means “short, small.” When derived with the suffix *-oj*, it becomes a verb indicating “to become short.” In the case of *k’un*, an adjective meaning “mild, soft, tender,” the inchoative can be formed with either *-ej* or *-ij*, both meaning “become soft (cf. Laughlin 1988:237). This example and others are most often translated by the Spanish lexographer as reflexives in “-se”: “ablandarse.” Others include *komoj* “hacerse corto” (“become short”) and *laanej* “aplacarse, sosegarse” (“become calm, calm down”). So although the Spanish original also translates mediopassives in a similar way, this is because the concepts expressed by verbs of “becoming” and mediopassives are sometimes similar, not because they are the

same form. This similarity is also noticeable in English. For example, the meanings of “get soft” and “get softened” are similar. However, there is, to be sure, a difference. Technically speaking, the former, the inchoative, does not allow for questions as to agency whereas the latter, the mediopassive, sometimes does. What is also relevant here, is that the inchoative “get soft” is formed using a root adjective and the latter, the mediopassive “get softened” is based upon a nominalization of a transitive stem “to soften (something).”

<i>k'in</i>	n1b	bewitchment, fate, fiesta, knowledge or prophesy of diviner, omen
<i>k'inij</i>	vi	cast lots, divine, prophesy
<i>jk'inijel</i>	agn	diviner
<i>k'inajel</i>	vn5	dawn
<i>k'op</i>	n1d	consent, message, offer, opinion, proposal, speech, word.
<i>k'opoj</i>	iv	become lord, govern, pray, rule (town government), speak, talk.
<i>jk'opojel</i>	agn	dealer, government, lawyer, speaker
<i>lot</i>	n5	lie, slander
<i>lotoj</i>	iv	lie, slander [i.e. “to lie”]
<i>metz'</i>	n5	excuse, wordy explanation
<i>metz'aj</i>	iv	explain or talk at length
<i>metz'ajel</i>	vn5	excuse, wordy explanation
<i>jmetz'ajel</i>	agn	person who explains at length
<i>'ojov</i>	n1d	king, lord, master of slaves, prelate
<i>'ajval</i>	n4d	master, person who afflicts or kills us
<i>'ajvalej</i>	iv	enter into servitude, take as one's master
<i>'ajvalel</i>	n1d	kingdom, nobility, prelacy

(Adapted from Laughlin 1988)

Figure 152. Colonial Tzotzil Antipassives in *-Vj* derived from Nominal Roots

4.6.2 Antipassives in *-Vj* derived from Nominal Roots

Figure 152 contains several examples of antipassives derived ultimately from nouns. Of course, antipassives can only be derived directly from transitive verb stems. The noun roots in these examples are first derived as verbs by means of a transitivizer

consisting of a vowel. Although the examples in Figure 152 represent only a few of those contained in the Santo Domingo Zinacantán dictionary, I have only found /e/, /i/, /a/, and /o/ used in this way. In the closely related language, Tzeltal, Kaufman (1972:54-57) also documented examples in all but *-uj* as shown in Figure 144 above.

It is the *-j* which, in turn, derives antipassives from the transitive stems. Looking at the first example, although it is not explicitly attested separately, **k'ini* would be the transitive verb “divine/prophesy (something).” When derived as an antipassive verb by *-j*, it would keep a similar meaning but, being an intransitive, could have only one argument. The result would be the attested verb *k'inij*, meaning “to cast lots, divine, prophesy. Of interest in this example is that the vowel that derives the transitive verb from the noun root has a direct effect upon the lexeme’s meaning. While *k'inij* means “to divine,” *k'inaj*, based upon the entry *k'inajel* “dawn,” means instead “to dawn.”

4.6.3 Nominalization of Antipassives and Inchoatives in *-Vj*

Considering several issues already discussed, it is important to note how gerunds are derived from antipassives and inchoatives in *-Vj*. Only when the attested roots or stems are nominal and derived with the suffix *-V-j* or adjectival and derived with the suffix *-Vj*, does nominalization regularly occur by appending an *-el* suffix to that *-Vj* suffix. Also, with this group, the nominalizer *-ej* does not occur directly on the root or stem – which is not surprising since they already start as nouns or adjectives. When *-ej* does occur, it is, as already noted, a different suffix, the result of which is instead an intransitive verb, either an inchoative or an antipassive. Neither does the antipassive suffix *-van* (*-wan*) occur suffixed directly to their final stems in *-Vj*.

When the antipassive suffix *-van* or *-avan* does occur on words related to the members of this group, it is not attached to the bare suffix but rather to a transitive stem that was previously derived from the root by means of a different suffix. For example, the suffix *-lay* first derives a transitive stem from the root *k'op* “word, speech, message” resulting in *k'oplay* “bewitch, enchant [someone/something] (with words)” (Laughlin

1988:234). Then, in turn, the suffix *-van* derives an intransitive verb, specifically an antipassive, from the stem *k'oplay* to produce *k'oplayvan* “bewitch.” Next this stem is nominalized with *-ej* resulting in *k'oplayvanej* “enchantment” and “investigation.” Finally, to produce an agentive, the prefix *j-* is added to produce *jk'oplayvanej* “witch” and “lawyer.” It should be noted that **every one of these forms is explicitly attested** in the original colonial Santo Domingo Zinacantán dictionary. This is not a matter of speculation or reconstruction but rather simply taking into account what the Spanish compiler has provided as evidence.

Insofar as the group in Figure 152 is concerned, I would agree with Robertson et al. (2004) that the suffix in *-Vjel* as a whole represents a nominalized antipassive form. The suffix can be broken down into a vowel *-V* which derives a transitive verb, *-j* (or *-[V]j*) which derives an antipassive, and *-el* which derives a noun. However, the *-Vjel* suffix by no means represents double antipassivization or nominalization. Unlike Robertson et al. (2004), I see no double-duty being served here by any of the suffixes in the complex. I would also emphasize that the application of the two different sets of suffixes is not haphazard but rather quite regular and predictable, especially in Tzotzil. Nominal and adjectival roots can, in turn, be transitivized, intransitivized (antipassivized), and nominalized by different parts of the compound *-Vjel* suffix.

Looking back at the example of the nominal root *metz'* “excuse, wordy explanation,” deriving a transitive verb from it would result in **metz'a*, a form not attested as such in the Colonial dictionary. Adding a *-j*, derives an antipassive verb *metz'aj* meaning “to explain or talk at length.” Next, by adding an *-el* suffix to the intransitive stem one is left with a noun *metz'ajel* “excuse, wordy explanation.” Several examples of similar derivations are shown in Figure 152. Finally, to arrive at the agentives that were also discussed earlier, one simply needs to prefix *j-* which results in *jmetz'ajel* “person who explains at length.”¹⁵²

¹⁵² Application of this example to the present study is to be avoided.

<i>bon</i>	n5	cochineal, color, dye, pitch.
<i>bon</i>	tv	color, dye, paint.
<i>bonoj</i>	iv	dye, paint
<i>jbon</i>	agn	dyer. (tintor)
<i>jbonojel</i>	agn	dyer. (tintor)
<i>jak'</i>	n4d	investigation
<i>jak'</i>	tv	ask, investigate, pry into.
<i>jak'oj</i>	iv	investigate
<i>jak'ojel</i>	vn5	investigation.
<i>jjak'ojel</i>	agn	investigator.
<i>jak'van</i>	iv	ask, investigate.
<i>jak'vanej</i>	vn5	investigation, question..
<i>jjak'vanej</i>	agn	investigator.
<i>p'is</i>	n5	compass, measure, plumb bob, pound, right angle, ruler, sign
<i>p'is</i>	iv	make a sign (sign of cross, or gesture)
<i>p'is</i>	tv	compare, draw, falsify, forge, give an example, mark, measure, picture, sketch, weigh
<i>p'is ba</i>	rv	feign, pretend
<i>p'isbil</i>	pp	drawn, measured, weighed
[*<i>p'isoj</i>	iv	weigh, measure]
<i>p'isol</i>	n4f	mark, sign
<i>jp'is</i>	agn	person who gives true weight or measure.
<i>jp'isojel</i>	agn	person who gives true weight or measure.
<i>jp'isvanej</i>	agn	person who gives true weight or measure.
<i>tz'al</i>	tv	furrow (not plowing, but as the Mexicans prepare their corn fields), lay (stones, bricks, adobes as the officials do)
<i>tz'ol</i>	[n]	patch, pleat. cf. tz'al.
<i>tz'aloj</i>	iv	lay (adobes, bricks, stones).
<i>jtz'alojel</i>	agn	mason
<i>yakal</i>	aj.	snared.
<i>yok</i>	n5	snaring.
<i>yakoj</i>	iv	snare.
<i>yakojel</i>	vn5	snaring
<i>yakbil</i>	pp	snared

(Adapted from Laughlin 1988)

Figure 153. Colonial Tzotzil Antipassives, inchoatives, and agentives from words with multiple roots

4.6.4 Antipassives, Inchoatives, and Agentives from Words with Multiple Roots

The next group, shown in Figure 153 is related to those in Figure 151 and Figure 152. In fact, the examples shown in Figure 153 could have been included in one of the previous two figures if part of the data had been excluded. Both this group and the previous two include nominal and adjectival roots that are derived as antipassives and inchoatives respectively through the use of a *-Vj* suffix. They also both show evidence of suffixes of the shape *-Vjel* formed by deriving a noun through the use of an *-el* suffix. The group in Figure 153 differs in that its members can take derivational suffixes that are specifically reserved for use on transitive roots or stems. The reason for this difference is that related roots of the same shape are attested both as transitive verbs and as adjectives or nouns. Having already recognized that *-Vj* in these contexts attaches to adjectival or nominal roots and *-van/-avan* (*-wan/-awan*) to transitive roots, it should then come as no surprise, given their dual root status, to find both of them attached to these CVC roots. What is more, in both cases they derive intransitive (antipassive or inchoative) verbs, using *-Vj* and *-V-j* on the adjective and noun roots and *-van* on transitive roots. The importance of paying attention to these details cannot be overemphasized if the goal is to achieve the correct broader analysis of the applicability of the derivational suffixes. That goal hopefully justifies the inclusion of some of this detail in the accompanying tables.

The evidence from roots attested as solely adjectival or nominal and derived as antipassives using *-Vj* along with that from roots that are solely transitive and derived as antipassives using *-van/-avan* should be convincing enough to avoid misleading generalizations about duplicate antipassivizing or nominalizing suffixes. But even more important are the examples of words for which the meanings of the two roots is somewhat different. Such clues can provide further insight into the actual root source of the derived word. For example, while the transitive root *nop* means “compare, compose, devise, figure out, give an example, liken, etc.,” the adjective *nopol* means near, neighboring.” The derived intransitive verbal form *nopoj* means “approach, come near.”

So, added to the evidence provided by the nature of the derivational suffix, is the semantic information pointing toward its derivation from the adjectival root and not the transitive verb root. Examples such as these, which display semantic differences, provide evidence that can then be used to support the likelihood of derivation from different roots even in cases where the different roots are semantically much more similar.

Another instance that benefits from such comparisons comes from the example of *p'is* in Figure 153. Laughlin (1988:291-292) categorizes the root *p'is* as a noun, a transitive verb, and an intransitive verb. Agentives are often formed by prefixing a *j-* to nominal stems. In the case of *p'is*, the Santo Domingo Zinacantán Tzotzil dictionary attests three different forms of agentive, *jp'is*, *jp'isojel* and *jp'isvanej*. Among other places, all three are listed in the original dictionary under the Spanish entry “fiel de los pesos o medidas” “person who gives true weight or measure.” The first, *jp'is*, is formed from the noun root and the *j-* prefix. Although not immediately relevant to the main issue here, it does help to clarify that agentives can be formed directly from nominal roots. The other two are of more importance. Taking the last form next, *jp'isvanej* starts with the transitive root *p'is*, is derived as an antipassive by the suffix *-van*, nominalized by the suffix *-ej*, and then made an agentive by the prefix *j-*. Finally, the agentive *jp'isojel* starts not with the intransitive verb root, but rather with the noun root *p'is*. It is then derived as a transitive verb by the suffix *-o*. It is in turn antipassivized by the suffix *-j* giving **p'isoj*. The antipassive form is then nominalized by the suffix *-el*. Finally, the agentive is formed by adding the prefix *j-*.¹⁵³

This is precisely the pattern attested by all the examples in Figure 151 and Figure 152, but is not as obvious in this case because the final meaning is the same and so the form is not traceable semantically. The morphological derivational sequence, however, is exactly the same. It is really the existence of the different roots that finally leads to the different forms: *jp'is*, *jp'isojel* and *jp'isvanej*. The choice of *-ojel* versus *-vanej* is not

¹⁵³The form **p'isoj* is only attested in the dictionary in the agentive form.

free or haphazard, but dependent upon the character of the root that serves as the original stem.

<i>'il</i>	tv	experiment, find what one was looking for, have a vision, see.
<i>'iløj</i>	iv	witness
<i>'ilolaj</i>	iv	witness
<i>j'iløjel</i>	agn	witness
<i>j'ilolajel</i>	agn	witness
<i>'ilvan</i>	iv	see
<i>man</i>	tv	barter, buy.
<i>manøj</i>	iv	barter, buy
<i>manøjel</i>	vn5	purchase
<i>jmanøjel</i>	agn	barterer, buyer
<i>k'an</i>	tv	ask for, desire, try (to attack), want
<i>k'anoj</i>	iv	ask for, beg (poor person), demand.
<i>k'anoj</i>	n1d	object of one's desire, petition.
<i>k'anojel</i>	vn1d	beggary, demand, persistent or demanding request
<i>jk'anojel</i>	agn	beggar, demander
<i>k'anvan</i>	iv	beg (poor person).
<i>k'anvanej</i>	vn1d	beggary, demand, persistent demanding
<i>jk'anvanej</i>	agn	beggar

(Adapted from Laughlin 1988)

Figure 154. Colonial Tzotzil problematic antipassive derivations

4.6.5 Problematic Antipassive Examples

There is a very small group of verbs that appear to explicitly attest only transitive roots but include intransitive verb forms derived by *-Vj* suffixes. They are shown in Figure 154. Their roots are not explicitly attested as either adjectives or nouns in the Santo Domingo Zinacantán dictionary. However, in each of these cases, an intransitive verb in *-øj* is attested in the original dictionary. It is from those intransitive stems in *-øj* that the nominals and agentives are derived by the suffix *-el* producing the final forms ending *-øjel*. The intransitive verbs in *-van* are derived by that suffix directly from the bare transitive roots. It is from that stem in *-van*, as for example *ilvan* “see,” that the

nominals in *-ej* are derived. Then in turn, it is from the stem in *-ej*, for example, *k'anvanej* “beggary, demand” that the agentives in *j-* are derived as in *jk'anvanej* “beggar.” Although the Colonial dictionary does not attest separately all the intermediate stems for all these examples, evidence from Modern Tzotzil sometimes fills in the missing forms. For example Laughlin (1975:228) attests both *manvan* and *hmanvanej* for *man* “barter, buy.” Delgaty and Ruíz Sánchez (1978:55) attest the agentive *j'ilvanej* for *'ilvan* “to see.”

There is little doubt that the root *il* “to see” is a transitive root (cf., for example, Kaufman 2003:204). However, there is also evidence of its irregularity from many languages. One reason might be that it begins with a glottal stop or vowel, which often results in irregularity. In Ch'olan, including Classic Ch'olan, its root is usually accompanied by an *-a* when used as a stem for different forms. Although this trait is not as prominent in Tzotzil, it is probably reflected in the /o/ of the form *iloj*. All indications are that this is indeed an antipassive derived by the suffix *-j* and is a reflex of the antipassive form *ilaj* in Classic Ch'olan. The vowels /o/ and /a/ often interchange in several different contexts in both Colonial and Modern Tzotzil as reflected elsewhere, for example in *ojov* and *ajval* (see Figure 152).¹⁵⁴

The other two verbs, *man* and *k'an* are also attested as transitive roots. They both are also attested as intransitive verbs in *-oj*. However, they do not otherwise provide evidence of being irregular as does *il*. One possibility is that they represent instead gerunds in *-oj*. However, in the Santo Domingo Zinacantán dictionary, these forms are accompanied by inflection indicating that they are intransitive verbs, and the Spanish definitions indicate this as well. Since the entries for *man* in the dictionary are limited, there is not enough data to suggest what the driving factors for this anomaly might be. However, there are many entries involving *k'an*. As can be seen from the selection in Figure 154, a full complement of forms are attested precisely as they are for those

¹⁵⁴This alternation between /o/ and /a/ is common in the Santo Domingo Zinacantán dictionary and, most often, the meaning and use of both versions is identical if the form is otherwise the same.

analyzed as having both nominal and transitive root forms, as shown in Figure 153. Thus *k'anoj* would be derived as a transitive verb from the nominal root **k'an* by *-o* and as an antipassive in *-j* giving *k'anoj*, which is attested. This stem would then be further derived as a nominal by *-el* resulting in the attested *k'anojel* and as an agentive by prefixing *j-* resulting in *jk'anojel*, which is also attested. Starting with the transitive root *k'an*, suffixing *-van* provides the antipassive form *k'anvan* and adding the nominalizer *-ej* produces *k'anvanej*. Prefixing *j-* would result in the agentive form *jk'anvanej*. In sum, a case can be made that the root *k'an*, and probably *man* as well, have been reinterpreted as being both transitive and nominal roots. The same may be true of *il* but its irregularity alone could have led to the variant forms as well.

<i>tz'et</i>	tv	cut (upright object as a tree).
<i>tz'etoj</i>	n4d	tree being felled.
<i>jtz'etoj</i>		lo que así estoy cortando. ["that which I am cutting in that way"]
<i>chuk</i>	tv	fasten, seize, tie.
<i>chukoj</i>	n4d	object being tied.
<i>jchukoj</i>		lo que así estoy atando. ["that which I am tying in that way"]
<i>jam</i>	tv	interpret, open, uncover.
<i>jamoj</i>	n4d	article being opened.
<i>jjamoj</i>		lo que estoy abriendo. ["that which I am opening"]
<i>jop</i>	tv	hold or take a handful to put it down.
<i>jopoj</i>	n4d	object being held or taken in handfuls.
<i>jopoj</i>		lo que así estoy abarcando o tomando. ["that which I am embracing or taking in that way"]
(Adapted from Laughlin 1988)		

Figure 155. Colonial Tzotzil verbal nouns in *-oj* and *-ej* derived from transitive stems – translated into Spanish as present progressive

4.6.6 Verbal Nouns in *-oj* and *-ej* Derived from Transitive Stems

Despite the mere handful of examples shown in Figure 155, there is a very large group of transitive verb roots and stems attested in Colonial Tzotzil (almost 70 of them are listed), which take a suffix in *-oj* or *-ej* to form verbal nouns. Neither the compiler of

the Santo Domingo Zinacantán dictionary nor Laughlin are completely consequent in how they analyze and translate the members of this group, so caution must be advised to avoid absolute statements as to Spanish or English equivalents. However, in reviewing all the entries in the dictionary, some clear patterns emerge. As shown in Figure 155, the most common translation pattern provided by the Spanish compiler is “lo que asi estoy . . . -Vndo” or “that which I am . . . -ing in that way.” Almost half of the entries in the original dictionary are translated using that pattern. In the case of *jtz’etoj*, for example, it is “lo que asi estoy cortando” “that which I am cutting in that way.” As such, it specifically centers upon the object receiving the action that is current and ongoing. The action itself is placed into the present progressive. The subject is “I” or “you” with a generalized reference to the object fronted as “lo que,” “that which. ”

It should be noted here that in each case, the second entry is Laughlin’s analysis of the form represented by the original dictionary entry in *-oj*.¹⁵⁵ The third entry is the actual form found in the original dictionary before being analyzed by Laughlin. Also, the *j-* in each case here is the 1st person ergative person marker and is not related to the agentive prefix encountered in some of the figures. Laughlin’s translation as present passive, however, also does not match the original Spanish. This difference will be addressed later.

¹⁵⁵Thus in the case of the first root in Figure 155, *tz’et*, “tz’etoj, n4d, tree being felled” represents Laughlin’s analysis and translation.

<i>moch</i>	tv	knot, make knots in string
<i>mochoj</i>	n4d	article being knotted anudarse algo
<i>jmochoj.</i>		lo que así anudo [“that which I knot in that way”]
<i>ch’ak</i>	tv	break or cut roots or vines with which they bind the wood of their houses, break cord or thread, decide a legal case, investigate, judge, postpone, rip clothing, rule a government or town, sentence, set a day, limit or place, tear, undo
<i>ch’ak</i>	iv	be fined, become a lord, break (cord or thread), come undone, govern, rip, tear.
<i>ch’akoj</i>	n4d	subject of investigation. averiguar
<i>jch’akoj</i>		lo que así averig[u]o . [“that which I ascertain in that way”]
<i>[k’uban</i>	tv	commit, deposit]
<i>k’uban bel na</i>	vphr:tv & nphr	impound one’s belongings
<i>k’ubanej</i>	n4d	object of one’s trust. confiarse
<i>jk’ubanej</i>		aquello en quien tengo confianza. [“that one in whom I have confidence”]

(Adapted from Laughlin 1988)

Figure 156. More Colonial Tzotzil verbal nouns derived by *-oj* and *-ej* from transitive stems – translated into Spanish as present tense

In Spanish, the present tense is closer to the present progressive than it is in English since it can refer to an event or state that is currently underway instead of just a repeated event or one that generally obtains. For example, “Lo que así anudo” means either “that which I knot in this way” or “that which I am knotting in this way.” In other words, it is not limited to the implication that it is something I usually do, but may just be something that I am doing now. Since that is true, an additional five entries (examples of which are shown in Figure 156) can be considered substantially the same as the more-than-thirty examples (four of which are shown in Figure 155), which form a group exhibiting present tense, non-perfect meaning or connotation in the original dictionary. Starting with the assumption that the Spanish Friar has correctly understood the forms he was documenting, all of these in both groups represent items or persons being acted upon

in a specified way. They are not presented as being in completed or past states, but rather as being in states that are currently obtaining. No information is given about their status in the past or up to the present point in time as is the case, for example, with the English present perfect. As such they are much closer to stative gerunds or participles than perfect ones. I believe this points to the diachronic origin of these forms as statives rather than perfects since, as argued earlier, the progression in languages is almost always from stative, to resultative, to perfect, rather than vice versa. So if MacLeod is right that these nominalized verbs are indeed related historically to the active transitive resultatives (her “perfects”) as well, those ancestral forms would likely be stative rather than perfect gerunds or participles.

For the most part, Laughlin’s English regularly follows the same translation pattern for each entry: “object being . . . -ed.” This is more abstract than the Spanish because Laughlin generalizes by dropping the prefixed ergative 1st and 2nd person dependent pronouns from the words as attested in the original. He does often use the gerund “being” which, as in the Spanish translations mentioned so far, tends to stress the ongoing present rather than the past, completed, or perfect. However, a critical difference is Laughlin’s frequent choice of a passive participle instead of an active participle in his definition. The original Spanish does not use the passive in any of the examples from the previous two groups in Figure 155 and Figure 156. However, the use of the passive voice is not absent from all of the Spanish translations of this overall group of nominalized transitives as can be seen in the next group of examples in Figure 157. There are about ten examples such as this in the original Santo Domingo Zinacantán dictionary, although half of them relate to a single set of entries concerning ways of carrying things as represented by the included example *petoj*.

<i>b'ut'</i>	tv	bury under, cover up. . .
<i>b'ut'</i>	iv	heal, mend (wound), sink.
<i>b'ut'oj</i>	n4d	buried or covered object
<i>jb'ut'oj</i>		lo así cobijado o lleno por mi. ["that which is covered or filled by me"]
<i>lek</i>	tv	occupy.
<i>lekoj</i>	n4d	high position, jurisdiction, object occupied or owned, power, repartimiento, territory
<i>jlekoj, alekoj</i>		ocupada cosa así por mi, por ti. ["thing occupied in that way by me, by you"]
<i>pet</i>	tv	carry in one's arms as children, transplant
<i>petoj</i>	n4d	object carried in one's arms.
<i>jpetoj</i>		cosa llevada de estos maneras . . . (en los brazos como a los niños) ["thing carried in that manner (in one's arms as with children)"]

(Adapted from Laughlin 1988)

Figure 157. Some Colonial Tzotzil verbal nouns derived by *-oj* and *-ej* from transitive stems, but translated into Spanish as passive

It is not immediately clear why the Spanish compiler translated this group differently from the majority of the examples already mentioned. It is worth noting, however, that the compiler uses the passive and not the resultative or perfect. The expression of agency using “por mi” (“by me”) leaves no doubt about this. It is also true that the passive voice is often used as a means of representing statives in many languages. So even these examples expressed in Spanish using passive participles add to the evidence that these forms in *-oj* and *-ej* represent stative gerunds or participles. Most often the Spanish equivalents are phrased as “cosa [+ passive participle] . . . de estos maneras.” When present, the agent is represented by an agency phrase “por mi/ti.” Laughlin most often has “object . . . -ed” followed by the specific method or position for the related action.

Up to now I have purposely avoided questioning the accuracy of the Spanish compiler because his data serves as our main source. However, it should be noted that

the number of entries translated in this way is limited. Although there are ten examples for which the passive participle translation is used, half of them occur in one entry.

<i>jjoynej</i>	lo que así ando cercando [“that which I go around encircling in that way”]
<i>joyb’il</i>	lo cercado así [“that encircled in that way”]
<i>jjoyb’en</i>	lo cercado por mi [“that encircled by me”]

(Adapted from Laughlin 1988)

Figure 158. Comparison of Spanish translation of same root with three different suffixes

Also, it should be noted that the Spanish equivalents listed for these entries in the colonial dictionary are otherwise reserved for stems suffixed by two different morphemes, *-b’il* and *-b’en*. The contrast is especially noticeable in listings which include all three suffixes as illustrated in Figure 158. Because the *-ej* suffix is a stative nominalizer, the translation provided is in the active voice “ando cercando.” Because *-b’il* includes the passive derivational suffix *-b’-*, the translation is done correctly using a passive participle “cercado.” With that in mind, conclusions reached about these gerunds or participles in *-oj/-ej* based upon the particular passive translations for the examples in Figure 157 should be evaluated accordingly. Considered in that light, I do not think that the passive translation given for this limited number of examples correctly represents the core semantic value of this *-oj/-ej* nominalizer group.

<i>lek</i>	tv	occupy.
<i>lekoj</i>	n4d	high position, jurisdiction, object occupied or owned, power, repartimiento, territory.
<i>jlekoj</i>		jurisdicción.
<i>k’aj</i>	tv	harvest corn. .
<i>k’ajoj</i>	n5	corn harvest.
<i>k’ajoj</i>		aquel acto de coger así [“that act of harvesting in that way”]

(Adapted from Laughlin 1988)

Figure 159. More Colonial Tzotzil verbal nouns derived by *-oj* and *-ej* from transitive stems – translated into Spanish as simple nouns

Another small group of words nominalized by means of the *-oj/-ej* suffixes are translated simply as nouns by the Spanish compiler of the Santo Domingo Zinacantán Tzotzil dictionary (cf. Figure 159).¹⁵⁶ When discussing the writing system, I noted that logograms have been used for inflected words such as *pakal* “shield” because the suffixed word itself had come to refer to a particular object. The character of such lexemes as derived or inflected is overlooked in favor of viewing them as representing an entity. It should not be surprising that there are some analogous words among this large group we have been examining. A small set of about five or so may be included in this group, which could be enlarged or decreased depending upon how literally one interprets the translations. The validity of including the two shown in Figure 159 is supported by their continued existence as nouns with the *-oj* suffix in Modern Tzotzil (Laughlin 1975:185,208). The suffix *-oj* has been otherwise replaced in this context by *-el* for the larger group as a whole and so is no longer productive in the Tzotzil of San Lorenzo Zinacantán.¹⁵⁷ As such, these examples parallel the nonproductive group identified by Kaufman (1971:71) for Tzeltal and noted above in Figure 148. One of the examples, *kajoj* for “corn harvest,” is identical. An example not included here, *k’eyoj* “song,” is clearly the reflex of Tzeltal *k’ayoh*. What is more, this lexeme has become *k’eyuh*, spelled with an /u/, most likely indicating a disconnect of the suffix from its *-oj* origins. The set exemplified in Figure 159 represents, then, the “fossilized” survivors among this whole group of nouns originally derived by *-oj/-ej* from transitive verb stems in Tzotzil. For Tzeltal, the *-oj* still remains and forms a part of the *-ojel* suffix.

¹⁵⁶The first of these two examples was also included in Figure 157. The form *lekoj* appears in several entries in the original dictionary with different meanings.

¹⁵⁷The Spanish entry for *k’ajoj* interprets it as referring to the “act of harvesting” instead of to the result of that act. It is not clear whether Laughlin interprets it as a noun referring to the result of the activity “corn harvest” or to the “harvesting of corn” meant in the sense of “corn-harvesting” instead. Still, even the Spanish compiler’s interpretation is a closer match with this group since it stresses the act rather than the object acted upon as is the case with some of the larger groups examined earlier.

<i>kuch</i>	tv	carry on one's back, endure (labor, pain, whiplashes), pay for another's sins
<i>kuchoj b'a 'och</i> <i>jkochoj jb'a xi'och</i>	vphr:rv & iv[S=A of tv]	slip through meterse o colarse por lugar estrecho como por entre verjas. [“to slip or squeeze oneself through a narrow opening as between iron fence bars”]
<i>kuchoj b'a 'anil</i>	vphr:tv/rv & n5	run hard (deer, horse, bull)
<i>tz'ak</i>	tv	fasten, know, mend (by fastening or sewing), stick on (graft), tie.
<i>tz'akoj b'a</i>	rv	become knotted or stuck [“in the state of being fastened to itself”]
<i>stz'akoj sb'a.</i> <i>'utz estz'akoj sb'a te xamite</i>		anudarse algo. [“It is in the state being fastened to itself”] The adobes are well-joined. [The adobes are in the state of being well-stuck to themselves”]
<i>meloj b'a 'ak'</i> <i>meloj sb'a xkak'</i>	vphr:s(rv/ap-) & tv	set in a row. poner por orden.
<i>meloj b'a lok'ob'-b'a</i>	s:rv/perf/ & -rn4f.	solid row of shields.
<i>meloloy b'a lok'ob'-b'a</i>	s:rv/perf/ & -rn4f.	solid row of shields.
<i>smeloy sb'a slok'ob' b'a.</i> <i>smeloloy sb'a slok'ob' b'a</i>		pavesada de pavesas pavesada de pavesas
<i>nop</i>	tv	compare, compose (couplets, song, words), devise, figure out (price, how made), fit into or together (door and doorjamb) give and example, imagine, liken, mediate, postpone, set in order, suspect
<i>nopoj b'a 'u'un</i>	vphr:rv + -n4d.	fit in. [“state of fitting into-selves/ together”]
<i>snopoj sb'a ku'un</i>	encajar una cosa en otra	[“They are in the state of being fit into themselves/together”]

(Adapted from Laughlin 1988)

Figure 160. Reflexives inflected for resultative aspect in *-oj* and *-ej*

4.6.7 Resultatives in *-oj* and *-ej* as Represented in Reflexive Entries

It is quite possible from a historical point of view that the stative gerunds and participles in *-oj/-ej* share a common diachronic ancestor with transitive resultatives in *-oj/-ej*. It is also to be expected that they, as inflectional affixes, would seldom if ever occur as dictionary entries. This is true of inflectional affixes in almost all dictionaries

and lexicons both Colonial and Modern and is not limited to the Mayan languages. That is why some dictionaries are accompanied by separate grammar sections or are supplemented by separate grammars. This is also true of the Santo Domingo Zinacantán Tzotzil dictionary, in which entries with resultative suffixes occur almost only in cases where contextual examples of specific lexemes are included for other reasons. In the case of transitive resultatives, the interest of the compiler in reflexive constructions has provided a larger than usual inventory of inflectional suffix examples, about fourteen, some of which are shown in Figure 160.

By nature, reflexives, which require both a subject and object, are best presented with part of their context intact if they are to make sense at all. Especially in cases of verbs that have semantically strong transitive roots, additional inflection is seldom presented in the original dictionary. One example of a verb that stresses action is *maj* “shatter with blows, whip, wound” which is attested as *jmaj jb’a* “se vinieron a las manos” “to come to blows” according to the Spanish (Laughlin 1988:745,1063). As usual, this entry is given in the first person singular form. Literally, this form seems to be translatable as “I hit myself” in English. Brian Stross (pers. com.) suggests that it may instead be best interpreted as “we hit each other” with the plural “facultatively expressed.” Important to note here is that this root is presented in neutral or unmarked aspect in the original dictionary and is not marked for the resultative.

There are also other verbs which, although they are attested as having both transitive and intransitive roots, have quite a different meaning for both. The intransitive root *mak* means “be constipated, become less ill, stop (bleeding). The transitive root *mak* is much more forceful and means “assault, cover, cut off one’s escape.” In a reflexive construction *jmak jb’a* means “encerrarse” “shut oneself up” (Laughlin 1988:254, 689). Finally, some transitive roots are included as reflexives in the dictionary both uninflected (Haviland’s “neutral” aspect) and inflected for the resultative aspect.

There is, however, sometimes a difference in meaning or connotation between the two contexts. As a transitive root in non-reflexive context, Laughlin (1988:178) glosses

tz'ak in Colonial Tzotzil as “fasten, knot, mend (by fastening or sewing), stick on (graft), tie.” In reflexive context, *tz'ak b'a* (reflexive in neutral aspect) is glossed as “join, mend (by fastening or sewing, bones), stick on (graft).” Laughlin abstracts the reflexive resultative form as *tz'akoj b'a* and translates it as “become knotted or stuck.” However, it is clearly not a versive or inchoative form as using the word “become” in the translation seems to indicate. I suggest instead the literal translation “in the state of being fastened/stuck to (it)self.” *Stz'akoj sb'a* (*ztz'acogh zba*), the 3rd person singular reflexive in the resultative aspect, is the actually attested Tzotzil form. The Spanish entry is also abstract (i.e. nonfinite), providing an infinitive plus indefinite pronoun “anudarse algo.” The Tzotzil sentence can be perhaps best translated literally as “it is in the state of being fastened/stuck [to] itself.” This change from stress on the action performed to the result of that action is noticeable in the difference between “join, mend” and “become knotted or stuck” brought on by the presence of both the resultative and the reflexive in combination. It is likely that the original dictionary compiler chose examples inflected for the resultative aspect because it was more appropriate in that type of context and so occurred more often inflected in that way.

The Tzotzil entries in the original dictionary allow for identification and analysis based upon their affixation. In the main entries, Laughlin mostly removes the affixation, including the pronouns, although his analytical notes sometimes help to overcome what, for our present purposes, is a drawback. In most cases, Laughlin simply notes “rv” for “reflexive verb” However, this provides no indication as to inflection, which could vary depending upon other circumstances. It is also true that reflexive verbs could be marked by something other than the resultative suffix and so the indication “rv” is not always complete for the specific form presented. In spite of this, evidence from the original entries indicates that most of these reflexive examples in *-oj* and *-ej* represent active verbs inflected for the resultative.

Analyzing these reflexive forms in *-oj* and *-ej* as resultatives receives support from Haviland (1988) who wrote a grammar summary for Laughlin’s Colonial Tzotzil

<i>at'</i>		wet, water (<i>ach'</i>)
<i>katinej jb'a ta ch'ich'</i>		I was bloodied.
<i>'atin ch'ich'</i>	vphr:tv & n5.	be stained with blood. [In orig. as <i>chuch</i> .]
<i>'atin ta ch'ich'</i>	vphr:iv & qphr(pre & n5).	be stained with blood. ensangrentarse.
		[In orig. as <i>chuch</i> .]
<i>'atinej ch'ich'</i>	vphr:tv/ap/ & n5	bloodied, bloody [ap = active participle?]
ensangrentarse. <i>xe'atin ta ch'ich'</i> , <i>xebaley ta ch'ich'</i> , <i>skatin ch'ich'</i> , <i>katinej jba ta ch'ich'</i> .		
<i>'elanej b'a</i>	nphr(vn4f of rn4f) & tv-	place against. .
<i>yelanej sb'a sti' lok'ebal sna xchi'uk sna X</i> . His house faces X's.		
		(Literally, "the entrance to his house has faced itself with the house of X.").
poner in contrario. <i>yelanej sb'a xkak'</i>		
<i>jok'</i>	tv	dig (as they dig with poles).
<i>jok'an</i>	tv	hang. colgar
<i>jok'anej jb'a</i>	rv	commit oneself to another's protection, confide in, trust
<i>jok'anej b'a</i>	rvn.	confiding, trusting.
<i>jjok'anej b'a</i>	nphr(agn & rn4d).	confident or trusting person.
		[Haviland (1988:104-4) finds the rvn and agn analysis in the previous two entries questionable]
confiado.	<i>k'ubul, jok'ol, tzoyol, jk'ub'anej jb'a, jjok'anej jb'a</i> .	
confiarse.	<i>jk'ub'an jba, jman jb'a, jjok'an jb'a, jtzoy jb'a</i> , i.e., <i>cuelgome o atome de fulano</i>	
aquellos en quien tengo confianza. <i>j'ub'anej, jjok'leb', jtzoyleb'</i> .		
(Adapted from Laughlin 1988)		

Figure 161. Some problematic or misinterpreted examples of reflexives inflected for resultative aspect

dictionary. There are indeed some examples on which Laughlin and Haviland do not agree. One of these problematic entries is “*jjok'anej b'a* nphr(agn & rn4d). confident or trusting person. confiado” as analyzed by Laughlin (1988:212) and shown in Figure 161. The original Tzotzil entry, with only the orthography changed, is *jok'anej jb'a*. Considering the form of an accompanying homonym *jk'ub'anej jb'a* with its initial *j-* followed by its first consonant, Laughlin is surely justified in adding the second *-j-*. However, he interprets the first *j-* as an agentive prefix, which would be formed from a nominalized stem. But as Haviland notes, that is not how reflexives are nominalized in either Colonial or Modern Tzotzil. Instead, one would add the suffix *-il* to *b'a*, resulting

in *b'ail*. In this case, if it were really an agentive, it would likely be **jjok'anej b'ail* instead. Haviland's (1988:104-05) suggestion is that "Perhaps this expression would be better analyzed not as an agentive noun but as a perfective [Haviland's own "stative," my "resultative"] verbal sentence meaning 'I have committed myself.'" Literally, it would be "I am in the state of having committed myself" or figuratively "I trust." Instead of the *j-* being an agentive prefix, it is instead the first person ergative (Set A) pronoun as it so often is in other cases. It is also important to note that this is precisely how both Laughlin and the Spanish compiler interpret another entry that is alike in all the relevant details. The sentence *katinej jb'a ta ch'ich'* in Figure 161 is translated as "ensangrentarse" by the Spanish compiler and "I was bloodied" by Laughlin (1988:138). Literally, it would be "I am in the state of having bathed myself in blood."¹⁵⁸

There is little doubt that these and similar attested clauses and sentences are examples of reflexives inflected for the resultative aspect. If one attempts to interpret the verbs in *-oj/-ej* as representing the stative constructions with suffixes of the same shape that have already been reviewed, the reflexive examples fail to make sense. For example, *kuchoj* in Figure 160, as a stative gerund, is given the meaning "object carried on one's back" "cosa llevada de estas maneras." But in the context of the reflexive example *xkuchoj sb'a [ta] anil* "ran hard" ["he endured/carried himself running"] or *jkuchoj jb'a xi'och* "slip through" ["I carried myself, I entered"] neither the grammatical forms nor the meaning fit. Even if one attempted to interpret the sentence as a verbless stative, it would still not make sense, since it would then be referring to an object being acted upon rather than to a subject acting.

¹⁵⁸Note that the suffix *-in* can derive either intransitive or transitive verbs in Tzotzil. As a transitive suffix it derives usitatives (cf. Haviland 1988:85).

<i>'ich'</i>	tv	accept, exceed, receive, take. <i>kich'oj sk'op padre. I have received the priest's message</i> [This example is under <i>k'op</i> not under <i>kich'oj</i> .] Traigoos un mensaje de fulano o de parte de fulano
<i>b'et'</i> <i>b'et'oj</i>	tv n4d	dominate, subject, take one's place. jurisdiction, occupied place, power over a person, subject, subjection. <i>me ab'et'ojon me avolonon?</i> Am I your subject, am I your underling?
<i>ch'ak</i>	tv	break or cut roots or vines . . ., break cord or thread, decide a legal case, investigate, judge, postpone, rip clothing, rule a government or town, sentence, set a day, limit or place, tear, undo
<i>ch'akoj</i>	tv	determine.
<i>ch'akoj</i>	n4d	subject of investigation.
<i>ch'akoj 'olonton</i>		vpvr:tv/ap/ & n4d[A]. make up one's mind.
<i>jch'ak, jch'akoj</i> determinarse		determinar juzgando. <i>jch'ak kolonton, jch'ak ta kolonton, . . ., jch'akoj kolonton..</i>
<i>meyoj</i>	n4d	object or person being embraced
<i>meyoj k'ob'</i>	vpvr:tv/ap/ & n4d[A]	with one's arms crossed (idleness). Estar con las manos cruzadas sin hacer nada <i>smeyoj sk'ob</i> .
<i>nakoj</i>	n4d	subject of dispute
<i>nak</i>	tv	battle, compete against, conquer, contend, fight in a contest, make an enemy of, oppose, repel, resist, wage war against perseguir con pleitos o contradicción <i>jnakoj</i>
<i>ta</i>	tv	find what one was searching for, get, reach. .
<i>taoj 'olonton</i>	vpvr: tv & -n4d	be grievous, become very sick. enfermar gravemente, i.e., me llega al corazón <i>staoj kolonton</i> ["it arrived at/reached my heart."]

(Adapted from Laughlin 1988)

Figure 162. Transitive resultatives in *-oj* and *-ej* as represented in contextualized passages

4.6.7 Transitive Resultatives in *-oj* and *-ej* as Represented in Contextualized Passages

In addition to the reflexive transitive resultative examples, there are also several other transitive constructions interspersed throughout the Santo Domingo Zinacantán dictionary. Some of them are included in Figure 162. One of them, noted by Haviland is *me ab'et'ojon, me avolonon*. “Am I your subject, am I your underling” as translated by Laughlin (1988:166). Haviland (1988:120) notes that “the two clauses are not exactly syntactically parallel (because the first clause has a stative [resultative] verb, whereas the second has a possessed noun as predicate), but the outward form preserves a close similarity.” He translates the first part as “Have you dominated me” but perhaps an even more literal translation would be “Are you in the state of having subjugated me.”

Laughlin (1988:259,721), when parsing some of these examples, actually analyzes them as transitive verbs, for example *smeyoj sk'ob'* which the original dictionary translates as “Estar con las manos cruzadas sin hacer nada” (“to be in a state of having crossed one’s arms without doing anything”). So even though the nominalized form *meyoj* receives a separate listing as a noun, that gerund is not the morpheme included in this example. That Laughlin recognizes this fact is shown by his classification of *meyoj* in the contextual example as a transitive verb. However, it is not an active participle (“ap”) as he indicates but rather simply an active transitive verb inflected for the resultative aspect. Interpreting the form as a participle or gerund including the indicated definition or translation “object or person being embraced” would not provide the meaning given for the contextual example. That would be instead the equivalent of “to be standing around with one’s hands crossed doing nothing” according to the Spanish of the Tzotzil dictionary compiler.

Another example in Figure 162, *staoj kolonton* is especially clear. The original Spanish translation as “me llega al corazon,” “it arrived at/reached my heart” is given as the literal equivalent of the more idiomatic “enfermar gravamente” “to become gravely

ill.” Taking *taoj* here as a noun meaning “object that is being readied” (the other entry for *taoj* in the dictionary) would make this clause quite incomprehensible.

4.6.8 Conclusions from Analysis of *-oj* and *-ej* Suffixes in Colonial Tzotzil

The nominalizations of transitive stems using *-oj* and *-ej* are taken by the Spanish compiler of the Santo Domingo Zinacantán Tzotzil dictionary to be regular and productive, so much so, that he sometimes intersperses comments such as “forma por lo regular” “formed in the usual way” as in the entry for *jpetoj* and others. Because *-oj* and *-ej* are derivational suffixes when they are nominalizers, they normally require entries in a dictionary. Among other reasons, their meanings are often different from the underlying stems. On the contrary, the *-oj* and *-ej* resultative suffixes are instead aspectual inflection. As such, they do not derive new stems that can then be further derived. One can attach pronominal, temporal, or other enclitics but not derivational or other inflectional suffixes. So the stems which include the *-oj* and *-ej* suffixes that are mentioned by Robertson et al. as admitting of further derivational suffixes, could only belong to the nominalizing or intransitivizing sets and not to the inflectional set that forms the resultatives. That this is also true in the Classic Period texts will be argued later.

The information provided by the compiler of the Santo Domingo Zinacantán Dictionary indicates that the *-oj* nominalizers were very common in Colonial Tzotzil. Based upon Laughlin’s (1975) San Lorenzo Zinacantán dictionary of modern Tzotzil, they are scarce in Modern Tzotzil. Those that do occur later act more like nouns than nominalized verbs and are quite rare. Those in *-ej* are much more common and are regularly used as gerunds and participles. The suffix *-el* has evidently replaced *-oj* as a nominalizer of monosyllabic verbs in modern Tzotzil (cf. Laughlin 1975:125).

I have already suggested above a scenario according to which the *-oj* transitive resultative pushed out the *-ej* resultative on derived or multisyllabic verb stems. Continuing further along this line, the *-ej* suffix remained as a nominalizer of multisyllabic or derived stems. This therefore simplified or clarified the system and

removed the possibility of confusion between the one-time *-ej* resultative suffix and the *-ej* nominalizer. Finally, in a move to simplify even further and prevent confusion, the *-oj* nominalizer of root transitive verbs was then replaced by the *-el* suffix, bringing this whole system to the state obtaining in modern San Lorenzo Zinacantán Tzotzil.

What is most important for our purposes here is to note that the evidence from Tzotzil strongly supports the existence of two different *-oj/-ej* sets of suffixes that transitive verbs take, one of which is a nominalizer and the other a marker of active transitive-resultative aspectual inflection. Although the two sets shared the same physical shapes of *-oj* and *-ej* in Colonial times, by the time of modern Tzotzil as recorded by Robert Laughlin in late 1960s and early 70s, they no longer shared the *-oj* and *-ej* at all. Some evidence for the transitive resultative no longer employing *-ej* for derived transitives is actually already present in the Colonial Santo Domingo Dictionary in examples such as *smeloloy sb'a* (*zmelologh zba*) and *jk'ub'anoj jb'a* (*ghcuvanogh ghba*) although the latter was “corrected” by Laughlin (1988:236) to *k'ubanej ba* in the main Tzotzil-English section of the dictionary. On the other hand, what was once the normal way (“forma por lo regular”) to derive nominals from root transitive verbs, *-oj*, became practically extinct in modern Tzotzil. All that remains of the stative nominalizer *-oj* used on root transitives in modern Tzotzil are a few examples of nouns such as *k'ajoj* “harvest corn” and *k'evuj* “song.” The examples of this nonproductive suffix parallels that of *-oj* on *k'ayoj* “song” and *k'ajoj* “harvest” in Tzeltal.

In almost all cases, the suffix *-el* has replaced *-oj* as the productive suffix for deriving nouns from CVC transitive roots. In Tzeltal, *-el* also became the productive suffix for deriving nouns from CVC transitives, but instead of dropping the former *-oj* nominalizer as was the case in Tzotzil, the *-el* suffix was simply added on to the root plus *-oj* stem (cf. Kaufman 1971:72 and Figure 150 above). Since *-oj* seems to have lost its previous significance, *-el* was now needed to serve the purpose that formerly was fulfilled by *-oj* alone. Nothing similar happened to the *-ej* nominalizer, and so it was retained and

used alone in both Tzotzil and Tzeltal on derived transitives without the additional *-el* suffix.

It is the cognate of the Tzeltal *-oj-el* compound nominalizing suffix that occurs in Ch'ol on *melojel* “proceso” (“trial”) and *xq'uelojel* “guardia, espia” as noted by MacLeod (2004:316). But as is clear from the previous discussion, I disagree that this should be generalized along with transitive resultatives and designated as “residue” of transitive “perfect” morphemes” that are present in the Classic Period. Instead, it is related specifically to the sets *-oj* and *-ojel* that derive stative nominals from transitive verbs and not to the set that inflects transitives for resultative (MacLeod’s “perfect”) aspect.¹⁵⁹ So I am not as “trusting that the *-ogh* [*-oj*] of *vet-ogh* and the *vet-oghel* [as a stative gerund] are the same morpheme” in the Tzeltal of Ara (MacLeod 2004:319). Whether or not these two sets had a common ancestor over one thousand years ago is a completely separate issue. I do agree that “we find side by side both the active perfect [my transitive resultative] and the gerund for this verb” (MacLeod 2004:319). However, at least synchronically, which is the only way morphemes can actually function in a language, they are not the same at all. Their meaning is not the same nor is the way they function the same. Even diachronically, especially within Tzotzil, the changes they undergo are not the same.¹⁶⁰

Ch'olti' provides further striking evidence for this point. I find no evidence for an active transitive resultative aspect in Ch'olti'. However, the presence of *-ojel* as a suffix that nominalizes transitive roots is clear. MacLeod (2004:319) mentions two examples

¹⁵⁹It should be noted that the use of *-Vjel* suffixes in Ch'ol is much more complex than this short mention indicates. Indeed, there are others that derive nouns from transitives, adjectives, and other nouns and are clearly cognate to similar suffixes in Tzeltalan. Other superficially similar suffixes appear on intransitive verbs in incomplete aspect. However, none of these represent the transitive resultative (or “perfect”) aspect which is not present at all as such in Ch'ol.

¹⁶⁰Perhaps MacLeod does not disagree with this and I have misinterpreted what she means in the quoted passage and elsewhere. If all she means is that at one time in the distant past prior to Colonial Tzeltalan and Classic Ch'olan times, the two sets developed from a common ancestral morpheme or morpheme set, then I have no problem with it as a possible historical scenario for its source. However, just the separate history of changes the two sets undergo independently in Tzeltal and especially in Tzotzil provides enough evidence that they were not understood by the speaking community at the time to be the same sets at all. Their different meanings and usage during those time frames reinforce that hypothesis.

provided by Morán in his *Arte de la Lengua Cholti: inu ilojel* and *in patojel*. Another example not mentioned by her is *in k'alojel* present in the same paragraph of his *Arte*. In each case, it is given as an alternative to a verbal noun formed with the suffix *-ia* (*ya[j]*).

c'ale hacer, *in c'alia* mi obra (también se dice *in c'alohel* mi obra); *illa* ver, *inu illia* (f) *inu ilohel* aquello que veo o está a mi cargo ver o cuidar de ello; *pata* formar, *in patia* (f) *in patohel* lo que yo formo. (Morán 1935a:4)

c'ale “to do,” *in c'alia* “my work” (one also says *in c'alohel* “my work”); *illa* “to see,” *inu illia* (f) *inu ilohel* “that which I see” or “is my duty to look after” or “to care for;” *pata* “to form, *in patia* (f) *in patohel* “that which I form.”

Especially in the Spanish translations “Aquello que veo” and “lo que yo formo,” it is immediately clear that these are precisely the type of translations used by the author of the Santo Domingo Zinacantán Tzotzil dictionary for the verbal nouns derived by *-oj* in Tzotzil. What is also noticeable, is that his translations do not give any indication that they are perfect participles. Just as in the case of the majority of the Tzotzil examples, Friar Morán also chooses to place the nominalized action in the present tense in Spanish. While translating *ink'alojel* as “my work” (“mi obra”) may simply be a more idiomatic translation, rendering *inpatojel* as “that which I form” and *inwilojel* as “that which I see (to)” is more literal. It still does not necessarily embody the idea of a completed action but rather an ongoing state. Just as in the case of Colonial Tzotzil, the idea of an ongoing present state rather than a completed action or even the result of a previous action is intended. It is not a nominalized perfect aspectual form – which would be an anomaly or misanalysis in any case – but it is also not a perfect or even resultative nominal, but rather a stative gerund. In any case, the active resultative aspectual form is no longer present in Colonial Ch’olti’ at all – not even as “residue” – despite its presence in the Classic Period script.

<i>al</i>	<i>yalaaj</i>	say
<i>at</i>	<i>yatiij</i>	count, be in partnership with, become a partner, belong to
<i>il(a)</i>	<i>yilaaj</i>	see, witness, attend
<i>it</i>	<i>yitaaj</i>	join, accompany
<i>kab'i/chab'i</i>	<i>ukab'iiij</i>	oversee, govern, guard
<i>pat</i>	<i>upatb'uuj</i>	make, form, do, build
<i>tz'ak</i>	<i>utz'akb'uuj</i>	put in order, govern

Figure 163. Transitive verb roots and stems that occur most frequently inflected for resultative aspect in Classic-Ch'olan texts

4.7 Transitive Resultative Inflection in Classic Period Texts

The Greater Tzeltalan transitive resultative verb form is of special importance for understanding its Classic Ch'olan cognate in the hieroglyphic inscriptions. Figure 163 contains a list of the verb roots and stems that occur most frequently inflected for transitive resultative in the Classic Ch'olan texts. All but one of them have already been illustrated in their glyphic forms above in Figure 134 and Figure 135.¹⁶¹ One of the examples, *ukab'iiij*, has already been briefly discussed. Also, the nature of transitive resultatives, in Tzeltal and especially Tzotzil has also been discussed in detail. When doing so, certain characteristics typical of resultative constructions were pointed out. These included especially an emphasis on the result of an action rather than on the action itself, and the reference to a particular event rather than upon a class or type of event in general – both characteristics that distinguish resultatives from perfects.

There is also another important distinction between resultatives and perfects that has already been noted. Because of its stress upon the action, the perfect aspect is not as limited in its application or scope as is the resultative. Because of its emphasis upon a resultant state rather than the action itself, the resultative aspect usually appears only on

¹⁶¹ A few of the verbs suggested to have displayed transitive completive inflection by MacLeod (2004:2007) such as *mek'*, *we'*, and *naw* have not been included here because their decipherment or meaning is not clear or because their occurrence with a final *ji* syllable is unique. Some such as *'u-CHUK-ya*, *'u-ko-b'o-wa*, *'u-CHOK-CH'AJ-ji* and others have not been included because they do not represent transitive resultatives. The reasons why some of these are not transitive resultatives will be addressed later.

verbs with a certain range of semantic content. That the number of verbs occurring in these contexts with the noted suffixes is limited, has been noticed for some time.

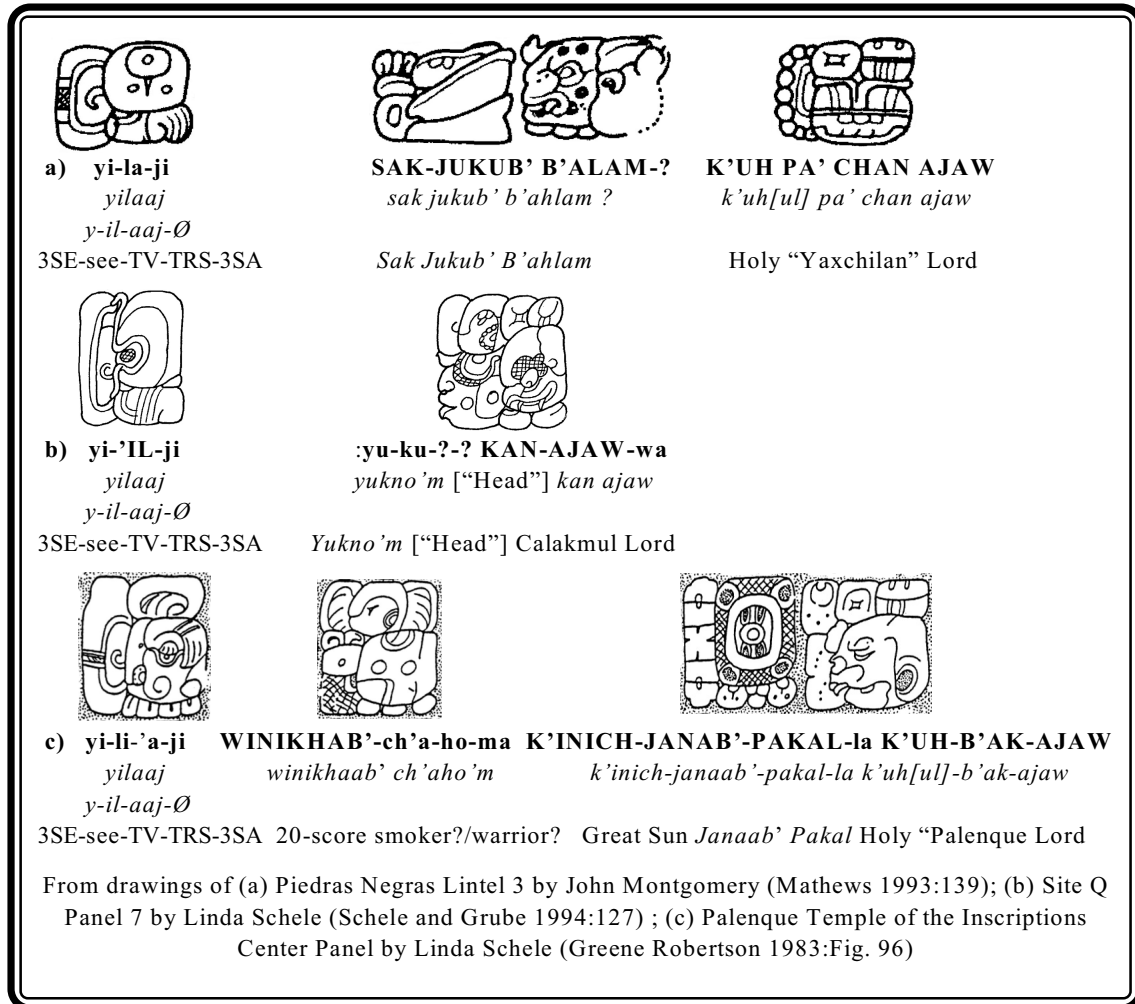


Figure 164. Some forms of transitive verb *il* inflected for resultative

4.7.1 Transitive Resultative Inflection on Irregular Stem *ila*

One of the verbs most commonly occurring with transitive resultative inflection in the Classic Period texts is *il*. Its basic meaning is “to see.” As inflected for the resultative, it occurs glyphically as **yi-la-ji**, **yi-'IL-ja**, and **yi-'IL-'a-ji**, as shown in Figure 164. It also occurs in other forms with additional attachments. But it is not the basic meaning of “see” that best qualifies it for use in the resultative aspect. More than just

meaning “to see,” the root *il* can also mean “attend, witness, visit, watch over, care for, see to it” as attested in the Ch’olan and Tzeltalan languages (e.g. Morán 1935a:4 and Laughlin 1988:146). These extended meanings are the ones that make it a prime candidate for resultative inflection since, based upon their semantic character, they imbue the agent with a state that remains with the actor even after the overt action of seeing is itself complete.

It is not unusual for verbs with the core meaning “to see” to take on the extended connotation of “to witness.” Even the Indo-European etymological source of the English word “witness” “*weid-*” (cf. video, vision) had the basic meaning of “to see.” But even more important are some of the other meanings. The meaning “visit” seems most appropriate in the Naj Tunich cave context but only one instance of *il* with transitive resultative inflection is attested there. Examples with transitive resultative inflection are more common in the context of period endings. Although “witness” is a possibility in these contexts, the connotations of “watch over, care for” seem perhaps even more appropriate since they are similar to those of *ukab’ijj* which means “govern, guard, watch over” (cf. Laughlin 1988:184). These meanings are very close to some of those for *il*.

So it is not by chance that the transitive resultative, which stresses the state resulting from a particular action, was used when reporting that an elite or royal personage watched over, attended, or witnessed a specific event such as the completion of a time period. Many monumental texts were written specifically for such occasions, although other events also qualified. On period endings, the intent was usually to stress the connection of a particular ruler to the time period and to the events that occurred during it. The ruler watched over the time period, was ultimately responsible for the main events, and likely attended the period-ending ceremonies. They often included the erection of the monument on which the current inscription was carved. The importance of the event was magnified by the presence of a person as indispensable as the ruler himself and the events themselves in turn magnified the importance of the ruler.

4.7.2 Transitive Resultative Inflection on Derived Stem *kab'i*

The transitive resultative form of *ukab'ii* occurs most often in two different basic glyphic forms as shown in Figure 165. One of them **'u-KAB'-ji** appears without further attachments. The other **'u-KAB'-ji-ya** includes an enclitic *-iiy* at the end which will be discussed later but is not immediately relevant to the present discussion. The emphasis in this case is upon the person in charge of, or responsible for, a particular action or event. This event is not shown in Figure 165.

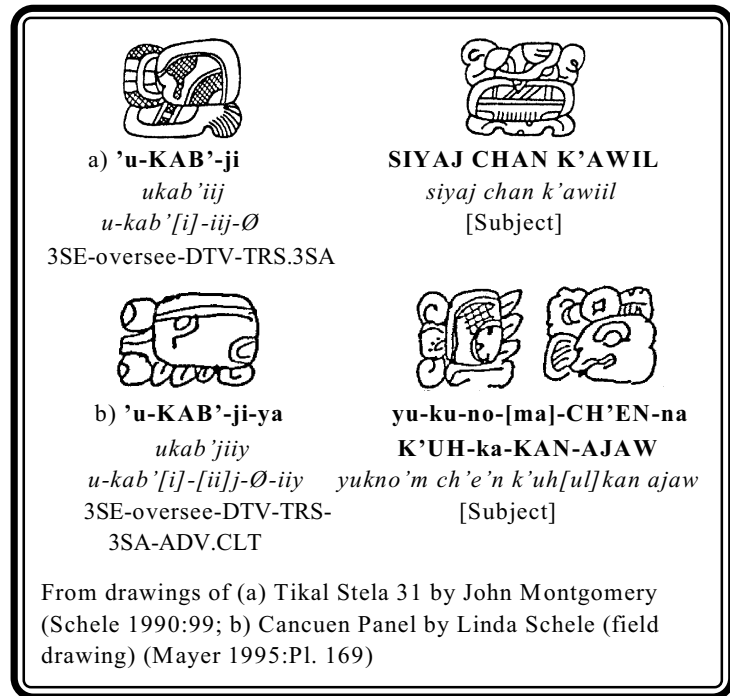


Figure 165. Some forms of transitive verb *kab'i* inflected for resultative

As noted before, the meaning of this derived transitive verb *ukab'i* (or *uchab'i*) is “to govern, guard, watch over.”¹⁶² The pronominal object is present, but the referent of that pronominal object is an event that is usually reported in the previous sentence or close to it. Among the events which serve as the pronominal referents are period endings,

¹⁶² Although *chab'aj* is an intransitive verb in Colonial Tzotzil derived from the same root but with the meaning “cultivate, plow,” *uchab'i* did not have the same connotation in that language. Although both are derived from the word *chab'* (*chob'*) meaning “cultivated field” and perhaps more generally at an earlier time “land, earth,” the meanings are still quite different. Despite earlier interpretations of this verb as meaning “land of,” in the Classic inscriptions it is unlikely that connotations of land or country play a role other than an etymological one in these and similar passages. As in all languages, connotations that were once present historically often go by the wayside and are quite often not meaningful or directly relevant to the current message being imparted. Of course such etymological information may be quite important and interesting for a history of cultural development as reflected in the languages. However, as is often the case in modern languages as well, it is not justified to assume that the speakers of particular words were aware of all the etymological connotations of the word that served historically as their source.

such as in Figure 165a, accessions of rulers, such as in Figure 165b, and captures of elite persons from other polities. The one who oversees the action or event in question is the subject of the sentence and the nominal referent of the ergative pronoun subject usually appears in the sentence following the verb. When inflected for the resultative aspect, the emphasis is on the ruler as being in the position or state of responsibility for the particular event referred to by the direct object pronoun along with all the credit that such a state might entail.

For the most part, it is the ease with which emphasis can be put upon the resultant state rather than primarily upon the action itself that determines which verbs occur inflected for the resultative aspect. It is that range of meaning that helps to qualify them for such contexts and not just whether or not they are CVC root or derived transitives. However, it may be that more derived than root transitives share an emphasis on capacities, qualities, and states rather than upon straightforward, agency-oriented action, but that is a separate issue that will not be addressed here. A quick review of the meaning of the verbs that occur with the transitive resultative inflection seems to bear out their statal, qualitative, and less direct connotations, especially noticeable in cases such as “to accompany,” “to watch over,” “to partner with,” “to oversee,” “to govern,” and “to form.” Examples of these in context will be examined next.

4.7.3 Transitive Resultative Inflection on Two Derived Positional Verbs

An example of a transitive positional verb inflected for the resultative inflection, *upatb'uuj*, was already included above in Figure 135e. As with the other transitive verbs so inflected, there are certain roots that tend to appear more often with resultative inflection. The reason for this, as with the other transitive roots and stems, rests upon their semantic characteristics.

One of these derived positionals appears on the West Side of Copán Stela 6 as shown in Figure 166. The word *tz'ak* is attested in various Mayan languages as a transitive, intransitive, and positional verb as well as a noun and a

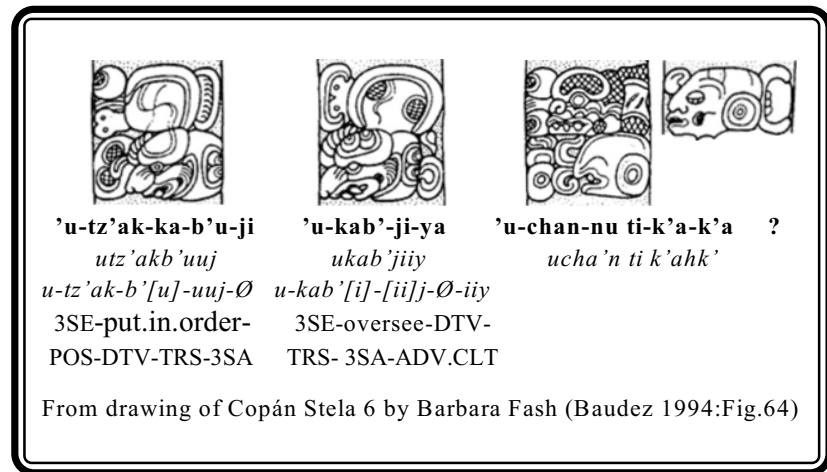


Figure 166. Derived transitive positional inflected for resultative aspect

numeral classifier. (cf. Kaufman 2003:803-807,1362).¹⁶³ In its different forms, it has a range of meanings such as “complete, mend, succeed, value, masonry, put in order, medicine,” and more. As a transitive verb, both as a root transitive and as a derived transitive positional, it carries a basic meaning of “to put in order, put in line” in most of the Ch’olan and Tzeltalan languages. In Wisdom’s Ch’orti, for example it can mean “join together, splice, do up in bundles, lay out end to end.” As a positional, which it is in this example, it can also have a meaning close to that of *ukab’i*. It is attested as a derived transitive in Yukatek as *tz’akaj* or *tz’akb’esaj* “guard, conserve, preserve, make exist” (cf. Barrera Vasquez et al 1980:873; Bolles 2001:1347). In this example from Copán Stela 6, it occurs marked with the transitive resultative suffix *-VVj* (*-Vj*) just as does *ukab’i* with which it is paired in a couplet. The verbs in that passage, *utz’akb’uuj ukab’jiij*, can be translated as “he put it in order, he oversaw it” or more literally considering the resultative suffix, “he was in the state of having put it in order, he was in the state of having overseen it.”

¹⁶³In a few Mayan languages the root is actually *tz’ahk* for some meanings, but since the *-h-* preceding a vowel is not written in the Classic script, this distinction would have to be made in the transcription after its semantic value has been determined.

performed even though it involved one particular action and may have happened quite some time ago.

The relevant example in Figure 167b is of *pat* as a transitive root inflected for the resultative aspect. This particular passage from Copán Altar P is very interesting because, similar to the example from Copán Stela 6, it involves a pairing of with *ukab'ij* which is also inflected for the resultative. “*Ukab'ij* [god’s name?] *upataaj b’a ajaw* “He/She oversaw it, [god’s name], he/she did it, the First Lord” (literally: He/She was in the state of having overseen it [god’s name], he/she was in the state of having done it, the First Lord”).

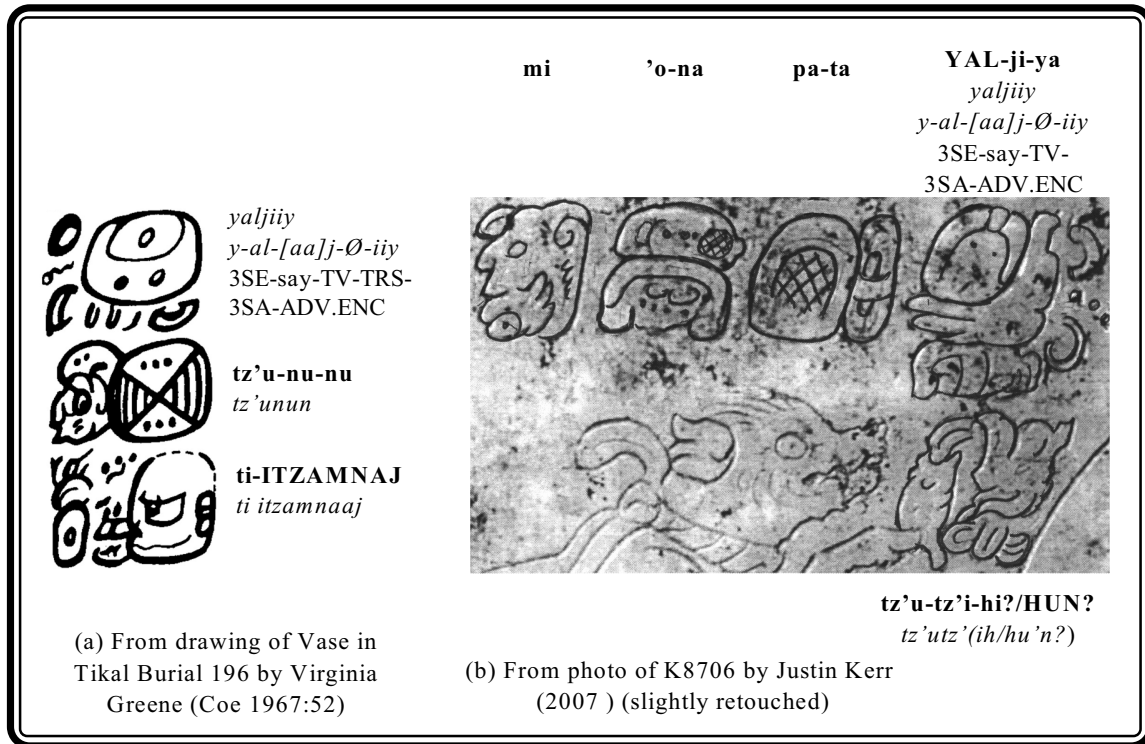


Figure 168. Transitive root *al* “say, speak” inflected for resultative aspect in connection with direct discourse

4.7.4 Transitive Resultative Inflection Used for Direct Discourse

Another context in which resultative aspect inflection regularly appears on a transitive verb is in the reporting of direct discourse. When the verb root *al* meaning “to

say” is used in this context, it occurs with the *-VVj* suffix as shown in Figure 168. A very well known example is on the “Hummingbird Vase” from Tikal Burial 196 (Figure 168b). The glyphic form of the verb is the same on both sides, **ya-la-ji-ya** for *yalajiiy* or *yaljiiy*. The interpretation of the *-iiy* will be addressed later, but it should be noted that the additional suffix likely causes the vowel of the resultative inflectional suffix to be shortened or to be elided altogether.

As far as the interpretation of the resultative in this context is concerned, the emphasis is likely on establishing the speaker, in this case the hummingbird, as “being in the state of having said it” to *Itzamnaaj*. In the example from Kerr vase K8076 shown in Figure 168b, it is an agouti who says: *mi o ’n pat* “[There is] not any tribute”. That it is the coati speaking is noted by *yalajiiy tz ’utz ’(ih/hu ’n?)* “he said it, coati.”¹⁶⁴ In both cases, the speakers are depicted at the time of actually saying it, which makes the use of the resultative even more appropriate since the depiction preserves them in that actual state. These vases likely depict scenes from well-known stories. Not only are the actions of the participants well known, but, as always in stories told and retold in all cultures, the speakers become known as the ones who utter particular words in particular contexts. These particular utterances become part of their persona, what they are known for saying. In other words, as the resultative implies, they are in the state of having said those particular words in a particular context. These are not only qualities that are precisely connoted by the resultative aspect, but qualities that distinguish the resultative from the perfect. The quotes refer to a particular utterance, not utterances of a general kind; and the emphasis is on the state of the individual as having uttered it, and not on the action of the uttering itself.

¹⁶⁴For the interpretation of *tz ’utz ’* as “coati” based upon its occurrence on other vases, see Grube and Nahm (1994:699).who reference Aulie and Aulie (1978:124) and Attinasi (1973:350). For the interpretation of *pat* as “tribute” see David Stuart (1998:384-385). The purpose or meaning of a possible suffix *-ih* does not seem apparent. If this is instead *hu ’n*, it could be a reference to a particular coati and might relate to the conspicuous band the coati has tied around its neck on this vase.

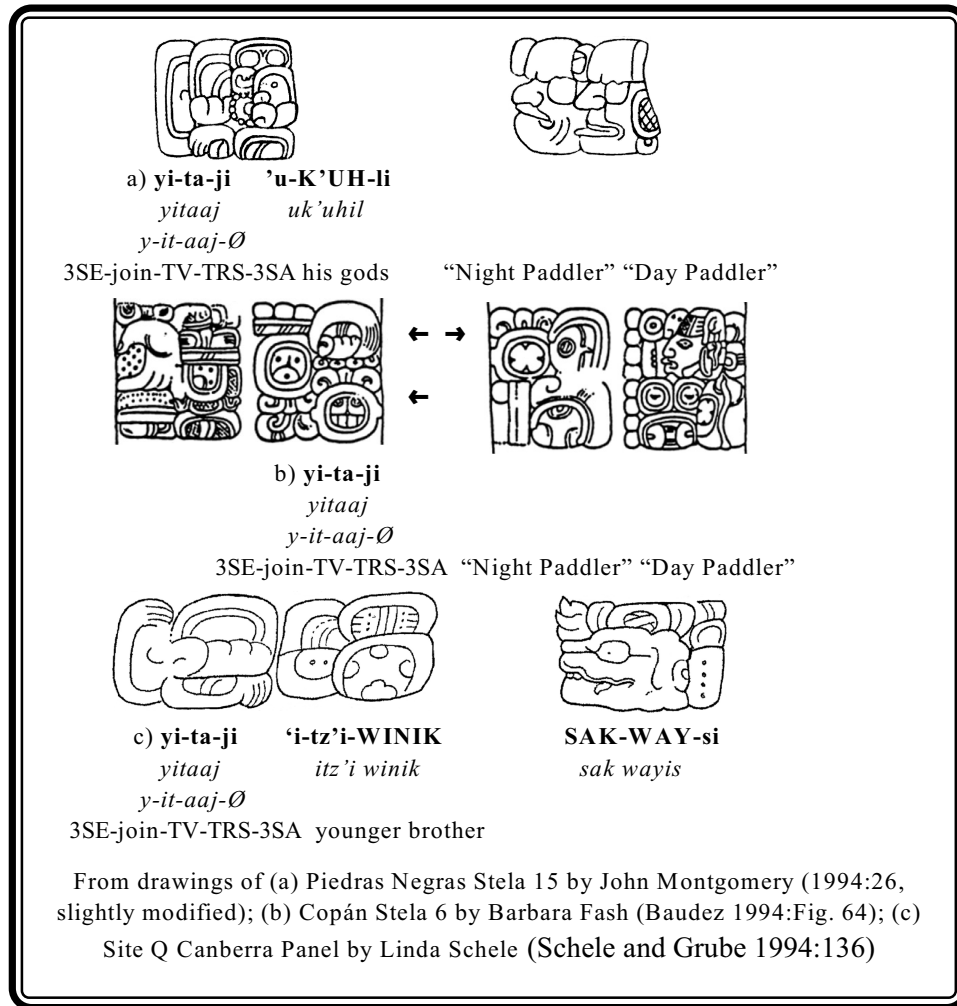


Figure 169. Transitive root *it* “join, accompany” inflected for resultative aspect.

4.7.5 Transitive Resultative Inflection – Root *it*

The verb *it* when it occurs inflected for the resultative as *yitaaj* is based upon a root found in the Ch’olan and Tzeltalan languages. Its form has undergone some change over time. In certain circumstances, *it* has combined with *ok* and has come to be used as a preposition meaning “with,” for example in Ch’ol as *yit’ok* or *yik’ot* (Aulie and Aulie 1999:159) and in modern Chontal as *t’ok* (Knowles 1984:470). In Acalan Chontal, it can be used in the sense of “with” but also in what Smailus (1975:74, 178) calls its primary sense as a verb meaning “juntar, reunir” (to join, assemble”) as in *yithoc belcah* (*yit’ok*

b'elkaj) “la gente fue congregada” “the people were assembled.” MacLeod (2004:301) also relates it to Yukatek *etail* “companion” with the /e/ having changed to /i/ in Ch’olan despite the occurrence of *etoqui* as a verb meaning “acompañar” in Ch’olti’ (Morán 1935c:4).

The basic meaning of the root *it*, then, is “to join, accompany.” It occurs often in the Classic texts, either in the context of elites accompanying rulers and other elites or in the context of gods joining or accompanying a ruler or elite person. Examples of the latter can be seen in Figure 169a and b. The verb *yitaaj* as inflected for the resultative is used quite often in the context of the two gods known as the “Paddler Twins,” because of their appearance as paddlers in canoes carved on four bones from Burial 116 at Tikal (cf. Schele and Miller 1986:270). Because their names are often written with glyphs containing a **K’IN** sign for “day, sun” and an **AK’AB’** sign for “night,” they have been referred to as the “Day Paddler” and the “Night Paddler” respectively. Their actual names have not yet been convincingly deciphered.

In the example in Figure 169a, *yitaaj uk’uhil* “Night Paddler” “Day Paddler,” the general meaning is “They joined/accompanied him, his gods, the “Night Paddler” and the “Day Paddler.” A more literal translation of the resultative would stress the lasting or stative character of the situation, “They were in the state of having joined/accompanied him, his gods, the ‘Night Paddler’ and the ‘Day Paddler’.” The referent of the dependent pronouns “his” and “him” is here the ruler mentioned in the previous passage. The example in Figure 169b is mainly the same as the previous one, except that the explicit reference to the subjects of the sentence as gods is absent. As is almost always the case in Classic Ch’olan, there is no marking on the verb or the dependent pronoun indicating a plural subject. Although not immediately relevant here, it is important to note for the argument that will be made in the next section that the “Paddlers” are almost always mentioned in the context of drops-throwing by the ruler on period endings. In the case of Figure 169b the message is *uchokch’aaj tu tanlamil waxak ajaw* “It was his drops-throwing on the half-score of 8 *Ajaw*.”

The example in Figure 169c, shows the verb *it* being used in connection with a human rather than with a deity. The sentence states *yitaaq itz(i) winik*, literally, “He (was in the state of having) joined/accompanied him, [the] younger brother person.” With the placement of the verb in the resultative aspect, the emphasis shifts from the simple act of joining or accompanying someone to an emphasis upon the establishment of a state resulting from joining with or accompanying someone in the performance of a particular act. Having the gods marked as companions during a particular event helps to establish its importance and validity. Having another person marked as a companion could enhance the status of either or both of those joining in the important event.

4.7.6 Transitive Resultative Inflection – Root *at*

Another type of relationship with divine beings is expressed by a different verb used in similar contexts as *it*. It, too, is most often inflected for the resultative aspect in such contexts. This root is *at*. Its interpretation has changed over time. At one point it was linked to the transitive root *at* which in Colonial Tzotzil (Laughlin 1988:137) meant “to count, belong to” and, most important, “to be in partnership with.”¹⁶⁵ Contextual examples include “*atb’ilon*, ‘I am your partner’.” and “*xa’atey ku’un*. ‘I make you my partner’.” In explaining this last example, Haviland (1988:114) notes: “*at* ‘count’; literally, ‘you are counted by/for me’.” If it existed as a transitive verb in English, one might say, “I partnered you,” or as a passive, “You were partnered by me.” The “Paddler Gods” are shown at the top of the stelae in both Figure 170 and Figure 171, one on each side of the rulers’ heads. They are seated astride winding volute-like shapes with circles around their borders. In the case of Ixlu Stela 2 in Figure 171, these forms have markings that otherwise appear on snake or millepede representations.

¹⁶⁵Schele (1992b:124) states that this interpretation was suggested by Nikolai Grube.

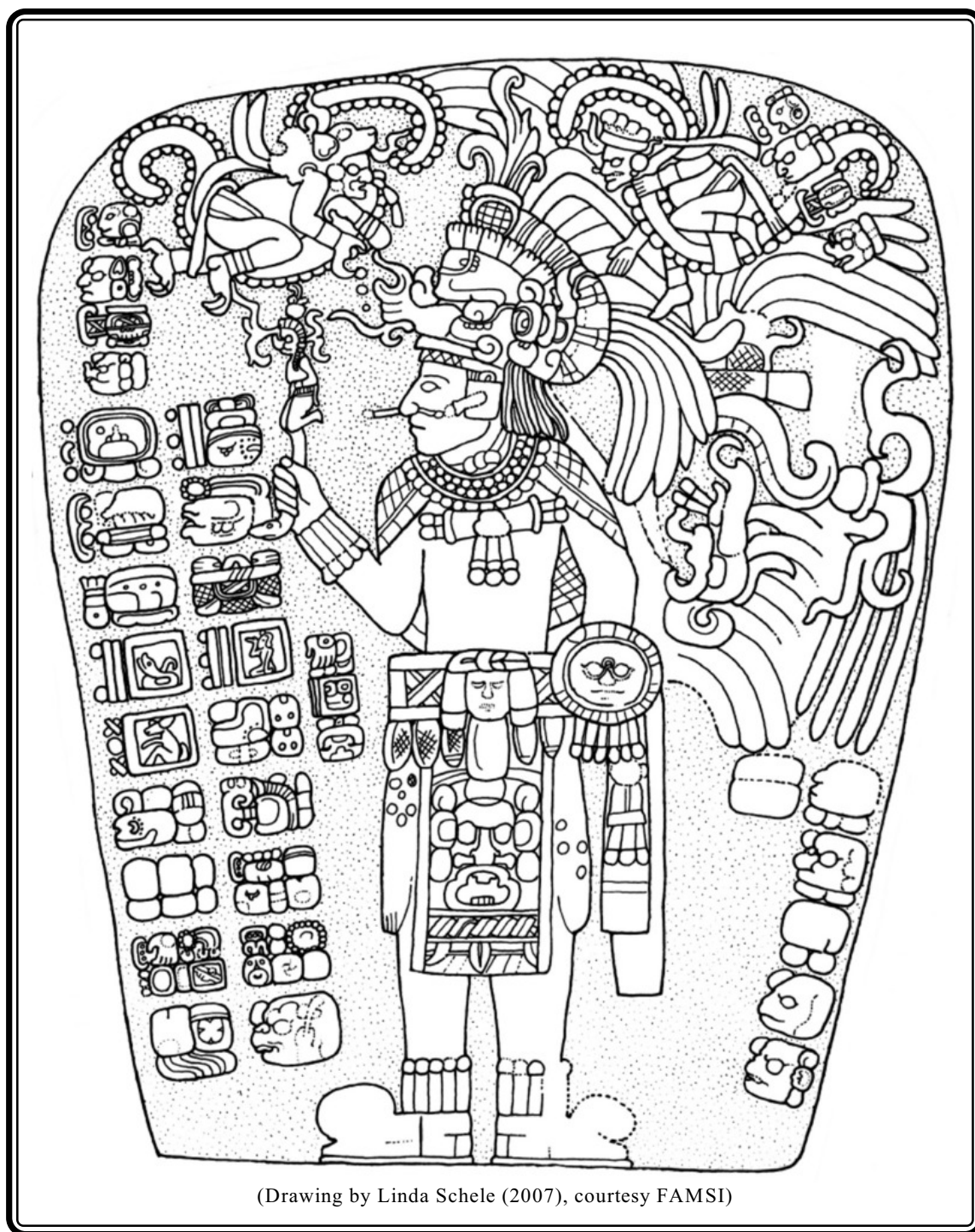


Figure 170. “Paddler Gods” partnering with ruler in drops-throwing ritual on Jimbal Stela 1

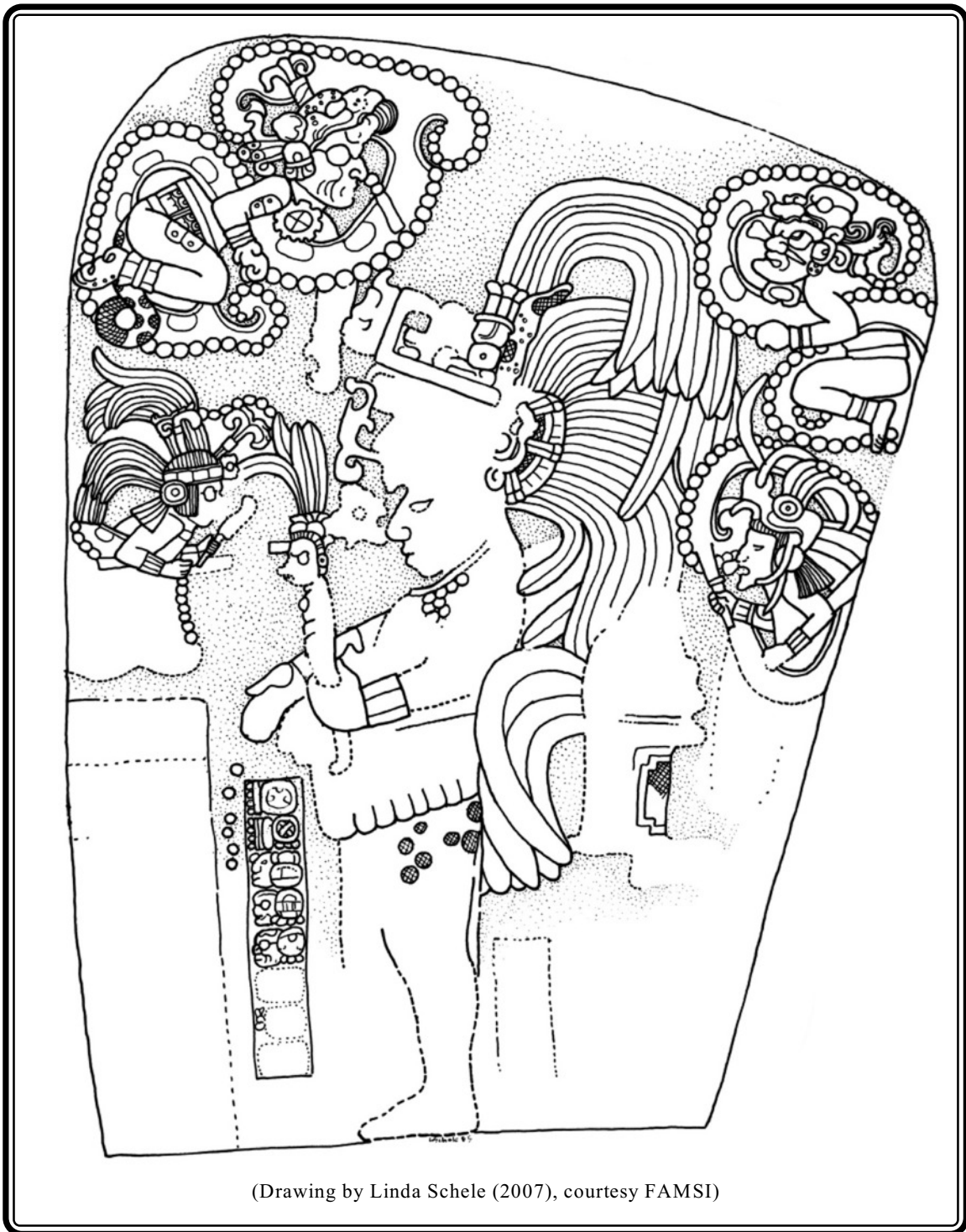


Figure 171. “Paddler Gods” partnering with ruler in drops-throwing ritual on Ixlu Stela 2

When the verb *at* is translated as “partner (with),” the “Paddler Gods” can be interpreted as performing a ritual action, in this case drops-throwing, along with the ruler. However, more recently, this interpretation has been replaced by a different one. Stuart et al. (1999b:169-171) point instead to the root *at* meaning “bathe.” Stuart describes the action of the “Paddler Gods” in scenes such as those in Figure 170 and Figure 171 as “bathing the ritual.” Stuart compares the dotted forms surrounding the Paddler Gods on the two stelae to the logogram **MUYAL** which is shown in Figure 172. The word *muyal* means “cloud.” As Stuart (Stuart et al. 1999b:169) stated in an edited unscripted presentation, “These dotted-scroll motifs are representations of clouds up in the sky floating around with little gods hanging on to them.” This interpretation of the dotted scrolls as indicative of clouds in the sky and the dots or pellets coming from the gods’ hands as water drops seems to be among the factors driving this reinterpretation. The earlier connection of these gods shown paddling canoes on the Tikal bones also seems to have reinforced this connection with water.

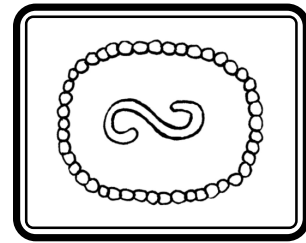


Figure 172.
Logogram **MUYAL**

The form of *at* most often encountered in the Classic-Period texts is written glyphically as **ya-ti-ji**. In Ch’orti’ (Wisdom 1950:454), *atih* is an intransitive verb meaning “to bathe, wash” or as a derived transitive *ates* “to bathe someone.” However, the interpretation of the **ji** suffix in **ya-ti-ji** in the Classic script as an indication of an antipassive nominalizer instead seems to provide the justification for interpreting the *y*-dependent pronoun as serving the role of possession. As already discussed above, I find it extremely problematic to interpret this particular suffix, either as *-ij* or *-j*, as both an antipassive derivational suffix and as a suffix deriving a noun from an antipassive in the same word at the same time. A suffix *-i* can and does derive transitive verbs from nouns. A *-j* can and does derive antipassives from transitive verbs derived by an *-i*. A *-Vj* suffix can and does derive nouns from intransitive verbs. Finally, the *-ej* suffix in Tzeltalan can and does derive nouns from antipassive stems as already argued above (Section 4.5.2.1)

and *-ij* could theoretically be the Ch'olan variant of *-ej*. However, these suffixes and their parts cannot be and are not applied haphazardly and each part does not each serve two different derivational functions at the same time. The same individual instances of the parts of the *-V-j* suffix do not at the same time both derive a transitive verb, derive an antipassive verb, and derive a noun.

I do agree wholeheartedly with the basic approach of combining factors from all areas or fields including iconography, epigraphy, linguistics, and grammar in order to arrive at secure interpretations, as indicated by the above interpretation. Nevertheless, I find that, in this case, such an approach leads to a different conclusion from one centered around bathing. There is no doubt as to the basic transliteration of **ya-ti-ji** since the value of the syllabic signs are generally accepted. The transcription may vary from *yatiij* to *yatij* depending upon how one interprets the use of *ji* here, whether as writing a nominalized antipassive or a transitive resultative suffix. Nevertheless, **ya-ti-ji** could still support either interpretation depending upon the character of the root and whether or not one accepted the Lacadena-Wichmann proposal concerning the length of the final vowel.¹⁶⁶

There is, however, a real problem with interpreting *yatij* or *yatiij* as a nominalized antipassive. The root *at* “bathe” is not transitive in any of the relevant languages. In order to use it as a transitive, *at* must first be derived through the use of a suffix such as a

¹⁶⁶It should be noted here that, although not mentioned by MacLeod, it is perfectly reasonable to accept her proposal that the combination of *-V-ej* led to a long vowel in the transitive resultative suffix in prescript time but with the loss of vowel length, it became *-Vj* shortened from *-VVj* by the time of the script. However, that scenario does raise a problem since MacLeod's proposal is based upon a vowel-final stem which would have occurred after the split of Ch'olan from Tzeltalan. The alternative would be to argue that the Ch'olan vowel-final situation – at least for derived or vowel/glottal stop initial words – held for Greater Tzeltalan as well, making Tzeltalan the family that innovated. Another alternative is to reconstruct *-Vj* as the transitive resultative which then over time was reduced to *-oj* for root-transitive verbs and *-ej* for derived transitives and finally to *-oj* for modern Tzotzil. In sum, as long as one arrives at either *-Vj* or *-VVj* (in this case *-ij* or *-iij*) as the suffix in question here, interpretations both as a nominalized antipassive and as a transitive resultative are still in play. In short, MacLeod's argument for the origin and development of the transitive resultative suffix is not dependent upon one's views concerning the presence or absence of vowel complexity or length differentiation in Classic Ch'olan. Still another variant interpretation may view *-ij* as reflecting the Tzeltalan suffix *-ej* following the Ch'olan sound change from /e/ to /i/.

causative, as in Ch'orti' *ates* (Wisdom) or as in Bachajón Tzeltal *atintes* (Slocum et al. 1999:7). Another possibility is the derivational suffix *-in*, which, although it can be used to derive intransitives, is also attested as deriving transitive usitatives in Colonial Tzotzil (Haviland 1988:85). Because antipassives can only be derived from transitive stems and *at* is not attested as transitive root, a process deriving it as a transitive would be required before it could be further derived as an antipassive. The *-in* suffix is also not attested with *at* in Classic Ch'olan. It seems then that the only likely possibility for it to be antipassive, would be to interpret *at* as a nominal root derived as a transitive by *-i* and as an antipassive by *-j*. However, this would result in an antipassive verb and not a noun in the form of a gerund or participle. As such, it could not be possessed through the use of an ergative dependent pronoun which is present in all of the relevant examples and as is suggested by Stuart et al. (1999b).

Although I do not accept the nominalized antipassive interpretation, the analysis of *yatiij* as a resultative still requires a transitive stem. I have just mentioned the possibility of an *-i* suffix deriving a transitive verb from *at* if it were indeed a noun root. While this remains a theoretical possibility based upon the Tzotzil derivations using *-in* usitatives, there is no direct evidence of this at all in Ch'orti'. Both Wisdom (1950:453) and Pérez Martinez et al. (1996:14) indicate that *at* “bathe,” is an intransitive and not a nominal root. Both attest *ati* (Wisdom *atij*) as an intransitive verb and form the nominal “bath” with *-er*: *ater*. Wisdom does leave the door open with the entry *at* “bath, bathing” but still forms the transitive with a causative suffix that derives transitives from intransitive verbs and not from nouns.¹⁶⁷ In sum, there is only a slight hypothetical possibility that the **ji** glyphic suffix writes a combined *-i-Vj* suffix deriving first a transitive and then inflecting it for the resultative. It could not represent an antipassive

¹⁶⁷ As noted by MacLeod (1987:Figure 1), the bare *-es* or *-se* causative in Ch'orti' is normally suffixed to intransitive or transitive roots. Another suffix such as *-t-*, *-r/-l-*, *-p'-*, or a few others intervene between the root and the causative suffix when the root is a noun or adjective. Also, in regard to *at* as a noun root, the caution voiced by Wichmann (1999:11) in regard to Wisdom's practice may be relevant: “Wisdom takes all verb roots to be nouns and invents nominal meanings for them”

verb form because it is prefixed by the ergative pronoun. It could also not represent a nominalized antipassive form because that would require one specific derivational suffix *-j* to perform two different derivational tasks at the same time.

Given the improbability that *at* is a nominal root from which a transitive stem could be derived, it is fitting to consider that *yatiij* may indeed have as its root a transitive verb.¹⁶⁸ Thus the most likely root would be *at*, the transitive verb meaning “to count, to partner with” that has already been mentioned. Arguments have been made here that this inflection represents that of the transitive resultative. Theoretically, based upon the *-ej* nominalizer in Tzeltalan, one could argue that *yatiij* with this meaning represents the Ch’olan form of the same suffix in *-ij*. However, as a nominalizer of transitive verbs in Tzotzil, that suffix only appears on multisyllabic stems (cf. Laughlin 1975:25). It also is not likely a nominalizer of an antipassive form in this case because there would otherwise be no suffix to derive the root as an antipassive. This would require *-j* to be both an antipassivizer and a nominalizer at the same time and arguments against this analysis were presented when the “bathe” interpretation was considered.

From a semantic viewpoint, the meaning and connotations of “to partner with” provide a much better fit with the set of verbs that one is likely to encounter in transitive resultative contexts than that of “to bathe (someone).” The latter is a more physical and straightforward action whereas “to partner with” more easily allows emphasizing the state accruing to one who performs the expressed action. Since it is a transitive verb, the resultant state would be that accruing to the one performing the action. In this context “Giving a bath” does not easily allow for an interpretation that implies an ongoing relationship on the part of the gods. On the other hand, implying that the gods, through their action of partnering in throwing or scattering drops, enter into an ongoing partnership with the ruler is not only understandable, but immeasurably enhances the

¹⁶⁸There is indeed a noun root *at* which exists in various Mayan languages. However, the root *at* as a noun has a quite different meaning in the related languages, that of “male genitals” (cf. Laughlin 1988:137 for Colonial Tzotzil and Knowles 1988 for Chontal). As such, it is not likely to be relevant in this case.

meaning and consequence of the ruler's ritual. Very often, the two paddler gods are the subject of the sentence with the pronominal object serving as a deictic pointing to a ruler mentioned nominally as the actor in a throwing or scattering rite *uchoko 'w ch 'aaj* "he/she threw drops." One of many examples is shown in Figure 173.

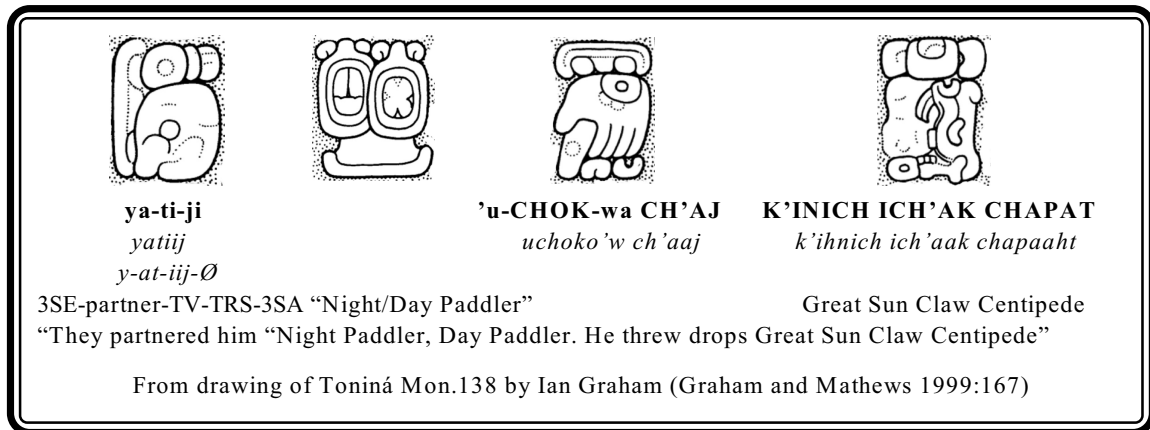


Figure 173. Paddler Gods partnering with Toniná ruler in drops-throwing ceremony

More often than not in similar passages, the mention of the "Paddler Gods" follows the report of drops-throwing by the ruler. However, in this case, the report of his being partnered by the gods comes first preceded by the moon information for the date of the event. The *uchoko 'w ch 'aaj* statement then follows. An alternative translation to that given in the figure might be "[On this date] the "Paddlers" were in the state of having partnered him [as] he threw drops, Great Sun Claw Centipede." Using the resultative aspect allows for stressing the current and ongoing partnership of the gods with the ruler who is performing the period-ending rite of throwing drops, probably of incense. Although we do not yet fully understand its significance, throwing drops is reported so often the texts of the Classic Period monuments and is mentioned so often as the main event on these monuments that its importance and the importance of having the "Paddler Gods" partnering with the ruler in that act can scarcely be overestimated.

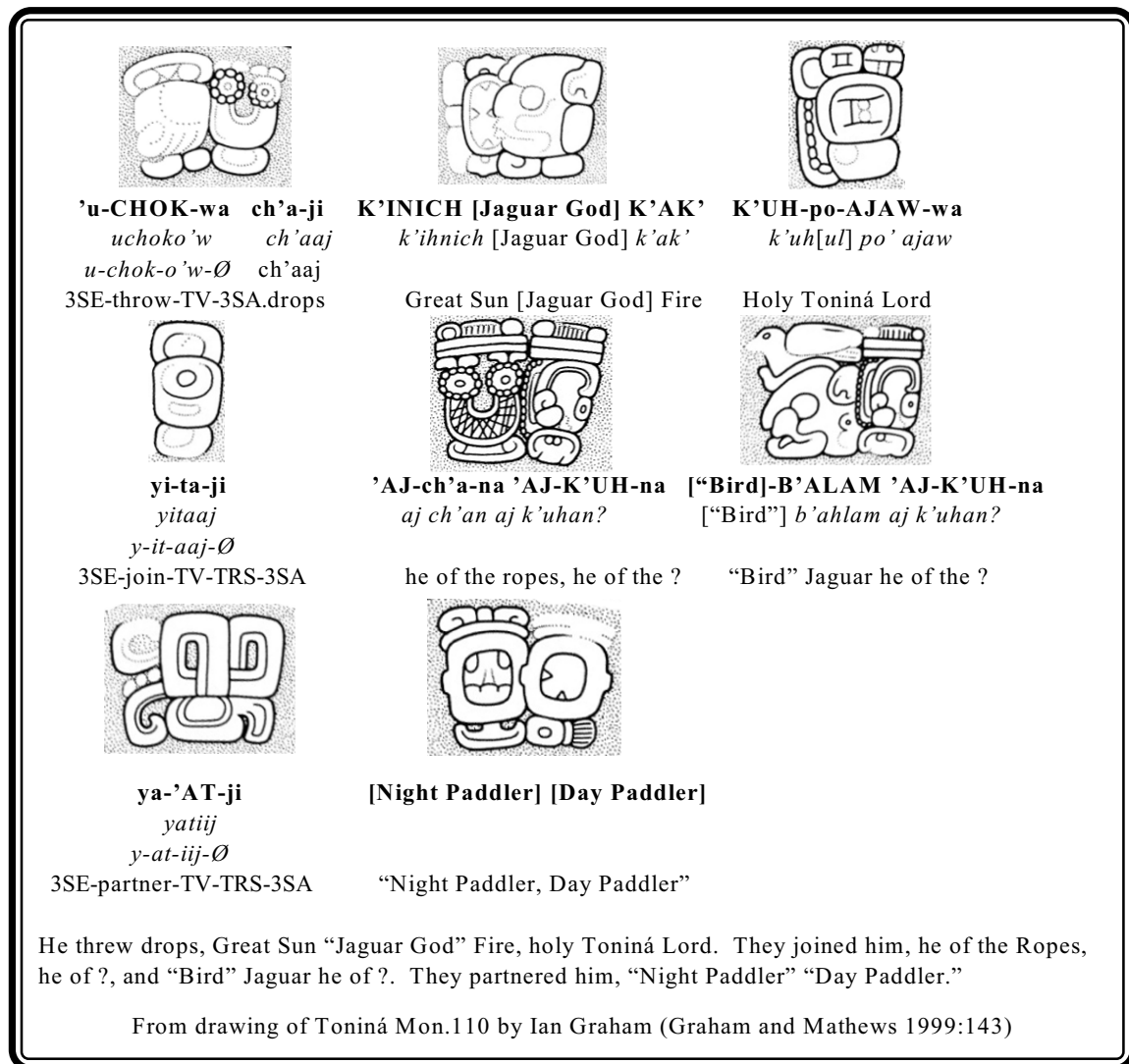


Figure 174. Paddler Gods partnering with Toniná ruler who is accompanied by two other persons in drops-throwing ceremony

Figure 174 shows another example from Toniná. It is especially interesting for this discussion because it contains both the resultative form *yatiij* and the resultative of the word that was just discussed in the previous section, *yitaaj*. Although the roots of these two verbs are completely unrelated, there is nevertheless a semantic similarity. The resultative *yitaaj* means literally "He/she was in the state of having joined/accompanied

him/her.” The resultative *yatiij* means “He/she was in the state of having partnered him/her.” In each case, the emphasis is on the subjects of the resultative verb having been with the person who is the object of that same verb while that person performed or attended a particular action or event. In this case, two members of the elite with the additional title *aj k’uhan* (or *aj k’uhu’n*) join with or accompany the ruler while the two “Paddler Gods” partner with him.

So far, the etymology, root class, aspectual inflection, and textual context provide evidence in favor of interpreting this verb as based upon *at* “to partner with.” Finally, a brief examination of the iconographic context can provide even more evidence that this is indeed the correct interpretation. We have already noted that the “bathe” interpretation seems to have risen partially out of scenes of the “Paddler Gods” enclosed in variously shaped, dot-bordered volutes as in Figure 170 and Figure 171.

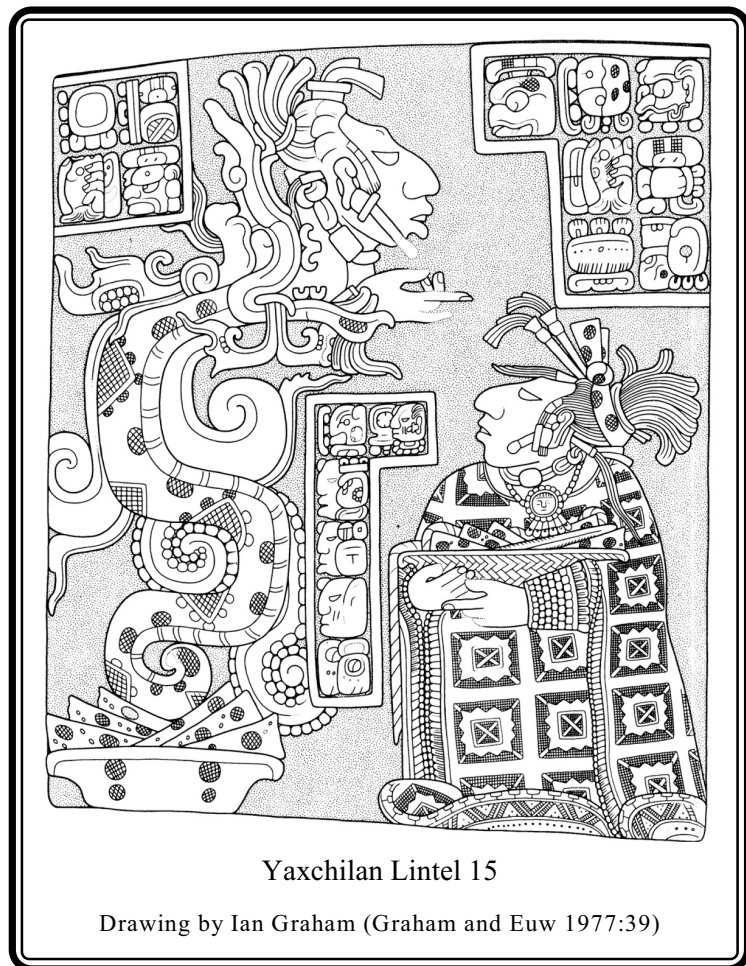


Figure 175. Dot-bordered volutes in context of conjuring

As already noted, Stuart et al. relate this to a resemblance with the logogram for *muyal*, “cloud” and then interpret the droplets falling from them as water or rain, purportedly alluding to an action of agricultural significance. However, when comparing these scenes

with others in which gods are conjured, for example in Figure 175, one can discern similar dot-bordered, smoke or vapor formed shapes accompanying the conjured serpent, the *way* of *k'awiil*.

These dot-bordered volutes are also present in scenes in which they could hardly represent clouds such as on La Pasadita Lintel 2 shown in Figure 176. There is no indication of any reference to clouds in the sky. Instead, it is part of a depiction of *Yaxun B'ahlam* of Yaxchilan who is throwing incense just as is the ruler is on Ixlu Stela 2. The dotted voluted shapes likely represent at the same time both the dropping of the incense into the burner and the inevitable rise of the smoke from the burning incense. The *sajal* who accompanies him is ready to either provide *Yaxun B'ahlam* with more



Figure 176. Dot-bordered volutes in drops-throwing context

pom incense or perhaps to throw some into the burner himself. Although there are iconic references to bloodletting contained in the imagery such as the three bow knots on Bird Jaguar's symbolic bloodletter and the bows on the burner itself, the main event in the depicted scene and in the text itself is *uchoko'w ch'aaj* "he threw drops."

Although such dotted volutes may in some circumstances iconically depict water or actual sky-borne clouds, they are clearly not limited to such interpretations. Nor do

they seem to be representing sky-borne clouds or water in any of the examples included here. Such iconography may instead be generally related to vapors, fog, or smoke of various composition and causes depending upon the context. On Yaxchilan L. 15, Ixlu Stela 2 and Jimbal Stela 1, these variously-shaped dotted-volutes serve to indicate the types of contexts and physical conditions in which these gods and other ancestral or non-human beings are likely to appear.

Upon reviewing carefully what action is actually depicted, for example, on Ixlu Stela 2 (Figure 171 above), it seems evident that the Paddler Gods are both performing the same ceremony as the ruler, *chokch'aa*j “throwing-drops” of incense, although the text reporting the event is eroded. Although the image is not perfectly presented, even the position of the Paddlers’ hands, especially clear in the case of the Jaguar or Night Paddler, points directly to the interpretation that he is throwing drops *uchoko'w ch'aa*j and not bathing someone, or even the whole scene, in water. It would seem rather incongruous for them to be scattering water on him while he is scattering incense. It is also not likely that the volutes depict water vapor here but rather the smoke that is the result of burning the very incense they all are throwing. In a very literal sense, the Paddler Gods are partnering with the ruler in the act of throwing drops of incense in the performance of the period-ending ritual.

On Jimbal Stela 1 (Figure 170 above), the ruler is not depicted throwing incense, but three separate passages report on precisely that act. That the “Paddler Gods” are throwing drops is even clearer on this stela. Not only are their hands correctly positioned for just such an act, but the drops coming from the hand of the Jaguar or Night Paddler are themselves visible on photos of the stela (cf. Sharer 1994:16). In many of the other inscriptions in which the Paddlers are mentioned, the main event mentioned in the text is that of throwing incense.

It should also be noted that, in most cases, both drops-throwing and the partnering by the “Paddler Gods” occur in the context of period endings. Period endings are based upon the Long-Count calendar with its year of 360 days. As such it is clearly not in sync

with the seasons of the year. One would think that if these scenes and the presence of the “Paddler Gods” were connected with agricultural ceremonies and rain, it would be tied more closely with the 365 day *haab’* cycle instead, which matches more closely the seasons over a longer period of time.

In the end, with the interpretation of the verb *at* in these contexts as a transitive verb meaning “to partner with,” everything falls neatly into place. There is no longer a need to explain away things that do not fit quite right whether on morphological, grammatical, lexical, iconographic, or cultural levels.

4.7.7 Discussion Concerning the Root *chok* and Transitive Resultative Inflection

Deciding which verbs would be amenable for use in transitive resultative constructions depends more upon connotations and nuances of meaning rather than absolutes. That said, the resultative is much less likely to be used on verbs whose meanings suggest straightforward physical actions, such as “hit, kill, throw” rather than less direct or mediated involvement such as “oversee, put in order, join, partner with, watch over.” The latter emphasize relationships and states whereas the former emphasize direct physical action. It is that quality of relating easily to states that is the most likely common denominator among the examples of transitive resultatives in the texts. That is part of the reason why it is not likely that the few examples of **u-CHOK-** with **ji** suffixes at places such as Toniná, Aguateca, and Piedras Negras are examples of transitive resultatives (or “perfects”) as suggested by MacLeod and Lacadena. It is true that **ji** is not always present on **ch’a** to form *ch’aaj* “drops,” but that phenomenon may not be due to the original status of T93 as a logogram. Instead, as indicated earlier in Section 2.2.8.5.3, **ch’a** is one of those primarily syllabic glyphs that occasionally can be used without a second syllable to stand for a whole word such as, for example, **yo** for *yop* “leaf” as suggested by Stuart (cf. Glassman 2001). Most instances do indeed include both syllables, that is, T93 **ch’a** and one of the **ji** syllables. T93 is indeed the main glyph with

that syllabic value and is used as the syllable **ch'a** in many other lexical contexts such as **ch'a-ho-ma** for *ch'aho'm*.¹⁶⁹ It is not primarily nor usually a logogram.

Also important to note is that the drops, that are often, although not always, shown coming from the **CHOK** hand (T710), are sometimes used as a logogram for **CH'AJ**. I suggest that in this case, the **ji** is likely providing a phonetic complement for that value. When such examples occur with both an **'u** glyph to write *u-* the 3rd person singular preceding a consonant and **wa** to write *-o'w*, as in **'u-CHOK-wa CH'AJ-ji**, the resultant clause is *uchoko'w ch'aaj* “he/she threw it/them, the drops. Thus although the **ji** is present, it would be difficult to argue that it is present to write the resultative suffix. There is no evidence that both the root transitive marker and the resultative suffix can occur on the same stem at the same time.

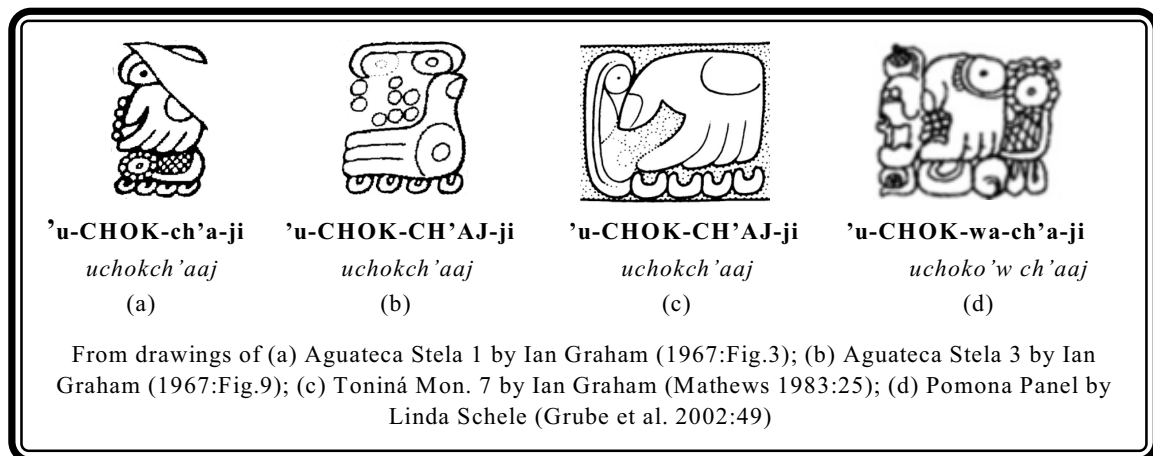


Figure 177. Three compound nouns compared to same two roots as transitive verb and its object

¹⁶⁹It is important to note, as pointed out by Grube (2004a:77), that this lexeme is *ch'aho'm* with a glottal /h/ and not *ch'ajo'm* with a velar /j/. Thus, *ch'a* is a syllable here and not a logogram **CH'AJ**. As also noted by Grube, this relates directly to the difference between *ch'ah* with the meaning of “smoke, incense” and *ch'aaj* with the meaning of “drops, pellets.” There are some problems with assigning the meaning “one who incenses” to *ch'aho'm* because an agentive formed from the word “smoke” would more likely be “smoker.” Words with the connotation of “to cense” in Tzotzil (Laughlin 1988:194) require further derivation as in *ch'atay* or *ch'ailtas* “to incense.” Another possibility is the meaning “fighter, warrior, soldier.” This would be related to Greater K'iche'an *ajch'a'ooj* based upon Proto-Mayan **ty'a'* ‘to fight’ as reconstructed by Kaufman (2003:54). Problematic with this interpretation is that the Classic Ch'olan root ends in /h/ instead of glottal stop /'/.

There are, to be sure, several examples for which the question is not so easily resolved. Figure 177a has the hand and dots plus *ch'aaj* with the four-looped **ji** under it. Others, such as the two from Aguateca and Toniná in Figure 177b and c, have examples similar to these which include the 3rd person singular ergative pronoun, the drops, the “hand” logogram, and the **ji** syllable. These are the type of examples that some have interpreted as resultatives (“perfects”) as noted earlier in Section 3.2.1.4. However, the alternative suggested here is to follow instead the pattern illustrated in Figure 177a. That particular passage can be transcribed as **'u-CHOK-ch'a-ji** and can be transcribed and translated as *uchokch'aaj* “[It was] his drops-throwing” or literally, but perhaps nonsensically in English, “his throw-drops.” Again, as stated earlier, it is very important to note that although a gerund could be used in English to translate this sentence, there is no gerund or participle present at all in this passage. Instead, *chokch'aaj* is a compound noun formed by appending a noun to the root or stem of a verb. The result is neither a verb nor a gerund/participle, but rather a compound noun. Such compound nouns are attested in most, and likely in all, Mayan languages.

According to the view being favored here, only the transliteration but neither the transcription nor the translation of the constructions shown in Figure 177b and c would differ from that in Figure 177a. Instead, the **ch'a** syllable would be left out while the **ji** would be still present as a phonetic complement for the drops coming from the **CHOK** hand. Those drops would serve, in turn, as a logogram with the value **CH'AJ**. The transliteration would result in **'u-CHOK-CH'AJ-ji** with the transcription being *uchokch'aaj* and the translation “[It was] his drops throwing.” The name of the possessor, the one whose drops-throwing it was, would then either follow or be obvious from another portion of the text.

This is not to say that all scribes interpreted the drops in that way. Many scribes may have considered them to be a part of the **CHOK** “hand” logogram as is perhaps the case in the Figure 177d example which shows a version of the clause with a transitive

verb: **'u-CHOK-wa-ch'a-ji** *uchoko 'w ch'aaj*. Because both the droplets and the syllabic spelling of *ch'aaj* are present, it is not necessary to conclude that the droplets actually are the logogram **CH'AJ** in that example from Pomona.

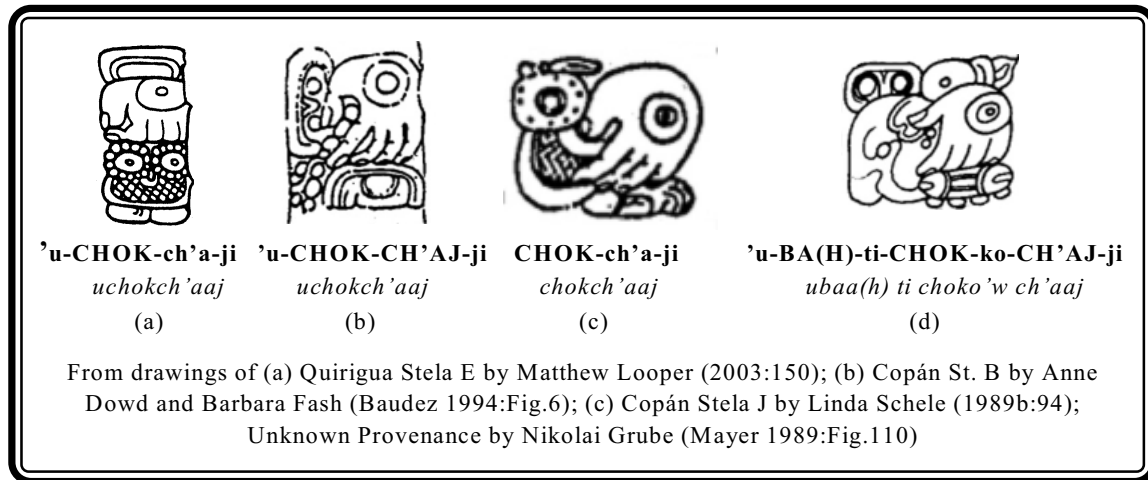


Figure 178. Less common constructions with **CHOK** logogram

There is also further evidence that not all scribes viewed the droplets in the **CHOK** hand in the same way. First, the logogram does not always include the drops. Figure 178a shows one of several examples without drops that can be found in the texts. The value of the logogram is not affected by that difference although there are other logograms that portray a similarly shaped hand which have different values. They are, however, used in different contexts. Figure 178b illustrates an example of the **CHOK** “hand” with the drops extending lower than the hand to meet the **ji** syllabogram. That may be this particular scribe’s way to emphasize that the **ji** syllabogram is meant to follow the drops. If so, the drops are likely a logogram with the value **CH'AJ** and the **ji** syllable provides a phonetic complement for that value: **'u-CHOK-CH'AJ-ji** *uchokchaaj* “[It was] his/her throwing-drops.”

The third example in Figure 178c is, so far, unique. It is however, quite significant for the argument that these forms of the *chok* verb are not inflected for the resultative aspect. The **ch'a** syllable is positioned to the left of the **CHOK** hand. Its

lower end is clearly in the position where the drops would be if any had been carved. At the bottom of the **CHOK** hand and to the right of the **ch'a** syllable is the syllable **ji**. Together they write the word *chokch'aaj*. It is important to note that there is no ergative pronoun. Its absence clearly rules out its being a transitive resultative. In its original context on Copán Stela J, there is no possessor at hand and it occurs simply within a date context. Thus it is meant to form a verbless sentence on its own along with the date. In this context, *chokch'aaj* could be translated instead as “[On this date] [there was/it was] a throw[ing]-drops” without explicitly identifying who performed the ceremony. Because the solution offered here – that it is a compound noun with the final **ji** related to the word *ch'aaj* either as its final consonant or as a phonetic complement – is valid for both unpossessed and possessed examples such as those in Figure 177a-c and Figure 178b, it is more likely to be the correct one.¹⁷⁰

If there are still any doubts remaining concerning the interpretation of *chokch'aaj* as a nominal compound, the example shown in Figure 178d should put them to rest. The transliteration is **'u-B'A(H)-ti-CHOK-ko-CH'AJ-ji**. Similar to the other forms that are being called “transitive perfect,” the **ji** syllable here follows the **CHOK** logogram and the **ko** syllabogram. There is no indication for *ch'aaj* other than the drops falling from the hand and they are likely a logogram for **CH'AJ**. As proposed by David Stuart and Stephen Houston, the clause **'u-B'A(H)** *ub'aah* in these contexts usually means something similar to “it is the image of” or “it is his image” (cf. Stuart 1996:160-162; Houston and Stuart 1998). It is followed by the preposition *ti* or *ta*, depending upon the dialect written at the site. Since what follows is the object of a preposition, it must be a noun. In this particular example, what follows **'u-b'a(h)** is **ti-CHOK-ko-CH'AJ-ji**.

¹⁷⁰If one interprets the **ch'a** glyph as a logogram, as some do, one could argue that this is an antipassive form **chokch'aajij* according to the *-i-j* noun > transitive > antipassive derivational pattern discussed above in 4.6.2. Such an analysis seems extremely difficult to accept compared to a more straightforward *chokch'aaj* verb-noun compound interpretation which has just been suggested. Also, because *chokch'aaj* is already a noun, there would be no need to nominalize it further in this context. Moreover, an argument made earlier would be applicable in such a case as well. If the whole *-i-j* suffix were required for deriving the transitive and the antipassive, it would not be appropriate to assign derivational double duty as antipassivizer and nominalizer to that same *-j* of the suffix in the same word.

Transcribed it is *ub'aah ti chokch'aaj* with the **ko** serving in this case as a phonetic complement. The **ji** in turn serves as a phonetic complement for the **CH'AJ** logogram. Thus this is another clear example for which a transitive resultative interpretation would simply not be suitable. Although there are some similar cases with other verbs in which bare verb roots can be recruited as nouns, in this case we have instead a compound noun. Translated, this sentence means “it is his drops-throwing (literally “throw-drops”).”

There is another interpretation which must be mentioned as a possibility with this set of constructions although I do not think it is correct in this case. That is, that some of them might be examples of the *-Vj*, specifically *-oj* or *-ej* gerunds exemplified in Tzotzil. The suffix *-ej* may have become *-ij* with the sound change from /e/ to /i/ in Ch'olan. Thus the examples in question could be interpreted as nominals formed with the Ch'olan equivalent of the *-ej* nominalizer.

I have already presented reasons specific to each example as to why they are instead better interpreted as compound nouns formed by the verb root *chok* plus the noun *ch'aaj*, either as *uchokch'aaj* or *chokch'aaj*, so these need not be repeated. In addition to these instance-specific arguments against their being analyzed as gerunds nominalized from transitives, there are other factors that also mitigate against such an

interpretation. One of the most important is that *-ej* is never used in Tzeltal or Tzotzil to derive nouns from root transitives but only from derived transitives. Only the **'u-B'AH ti CHOK-ko-CH'AJ-ji** example in Figure 178d might theoretically be interpreted as containing the gerund **chokoj*, since one could suggest that the **ko** syllable writes the vowel of the *-oj* suffix. However, the example from Ixkun shown in Figure 179 shows another *ubaah ti* construction that does not include a final **ji** syllable. In this case, the **CHOK** hand with the drops has to be

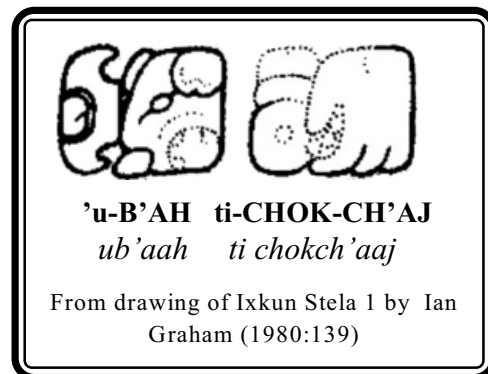


Figure 179. *Chokch'aaj* compound noun without final **ji** syllabogram.

transliterated as either **ti CHOK** or **ti CHOK-CH'AJ**. There are possible examples of verb roots used ostensibly as nouns in the inscriptions, so either is theoretically possible. For reasons already given, the **CHOK-CH'AJ** interpretation seems preferable. What it cannot be is a gerund derived by an *-ij* or *-oj* suffix. Yet it still functions in the same context. Thus this example provides evidence that a gerund is not necessary at all in this context and that there is no compelling reason for the example in Figure 178d to be interpreted as a gerund either. A further reason why I prefer to interpret this final **ji** syllable as related to writing *ch'aaʃ* rather than writing a nominalizer is that it does not occur on other verbs in similar contexts to write a gerund. That suggests that the interpretation of this particular suffix in this context as either “perfect” inflection or transitive nominalization may be based solely upon fortuitous coincidence. All the previous data when combined with this Ixkun example, and the circumstance that **ji** is otherwise used so frequently to write or indicate the final consonant of *ch'aaʃ*, makes it improbable that it represents an isolated example of either that inflectional or derivational suffix.

In sum, there seems to be no strong reason for interpreting any of these **CHOK** examples as being inflected for the resultative aspect. Lacadena’s suggestion that these examples represent the use of Tzeltalan or at least suggest the presence of Tzeltalan influence specifically at Toniná is now moot. It is clear that the Tzeltalan transitive resultative morphology was still an integral part of the Classic Period Ch’olan verbal system throughout the whole area during the Classic-Period. Of course, both Tzeltalan and Ch’olan descended from the same immediate language ancestor, and so there is also no linguistic need to explain the occurrence of “Tzeltalan” forms based primarily upon the proximity of the Tzeltalan area to Toniná. Instead, tracing it back to Greater Tzeltalan makes a lot more sense linguistically than suggesting that a morphemic suffix and aspectual form was borrowed into Classic Ch’olan or that it “percolated up” from the native Tzeltalan speakers in the area. That Classic Period Ch’olan would be more closely

related to Tzeltalan than most members of the Ch'olan language family are today is not surprising.

Finally, despite being in basic agreement with MacLeod concerning the presence of the transitive resultative (her “perfect”) in the Classic period, I disagree that it still exists or existed as such in any of the Colonial or Modern Ch'olan languages, including Ch'ol, Ch'olti', or Acalan Chontal. Its absence in Ch'ol and Ch'olti' has already been discussed. If indeed MacLeod does not intend to relate the *-ojel* suffixes in Ch'ol and Ch'olti' directly to the transitive resultative but rather to a different morpheme set which I am classifying as a stative gerund, then we do not disagree. However, she also seems to identify a different suffix *-ih* (*-ij*) in Acalan Chontal as attesting the existence of the “perfect” in that language. Needless to say, I disagree completely with that identification, but I will defer argumentation concerning that point until later, after introducing evidence concerning other morphemes which that suffix encapsulates (see Section 6.4.5.3 below).

I also disagree strongly that the transitive resultative suffix ever occurs on intransitive verbs as also suggested by MacLeod (2004:308-309). I also can see no legitimate reason to include verb forms such as *'u-ko-b'o-wa ukob'o'w*, *'u-kab'-ya ukab'iiy*, and *'u-CHUK-ya uchukiiy* – which lack completely any sign of resultative (“perfect”) inflection – as transitive resultatives simply because the referents of their dependent pronoun objects happens to be located in a previous sentence or passage (cf. MacLeod 2004:297-298). The tendency is often strong when new discoveries are made to apply the results of those insights to areas and affixes that go beyond the legitimate scope of the new data.¹⁷¹ I will discuss this issue and offer reasons later as to why it is incorrect to expand the transitive resultative interpretation to suffixes on intransitives. First, it is necessary to present evidence for what I suggest is the actual resultative suffix

¹⁷¹I did this myself when I first proposed the presence of the temporal deictic enclitic adverbial *-ijiiy* ∞ *-iiy* on verbs in Acalan Chontal and in Classic Ch'olan. MacLeod's recognition of the transitive resultative (her “perfect”) on some transitive verbs in the Classic texts serves as a correction to my hyperapplication of that suggestion. It is in the same spirit that I will be offering a correction to what I think is her hyperapplication of the scope of the transitive resultative (her “perfect”) suffix.

that occurs on intransitive verbs both in Colonial Tzotzil and in Classic Period Ch'olan. What it is in Modern Tzeltal and Tzotzil has already been discussed in sufficient detail.

5 Intransitive Resultative Aspect

5.1 Analysis of *-Vm* suffixes in Colonial Tzotzil

Strong arguments for the existence of an *-em* intransitive resultative suffix in Tzeltal and Tzotzil have already been presented (cf. Sections 4.2.6 and 4.2.7). The evidence from Modern Tzeltal was based mainly upon the analysis by Smith (n.d.; 1999), and from Modern Tzotzil based mainly upon analysis by Haviland (1981; 1999). Not surprisingly, Haviland (1988) argues that intransitive resultative forms were a part of Colonial Tzotzil verb morphology as well. However, according to Haviland the forms were not necessarily the same. His list of morphological aspect markers includes this: “*-em/-om* stative [i.e. resultative] aspect (intransitive) (modern Zinacantec Tzotzil has *-em*)” (Haviland 1988:85).

Just as with transitive resultative inflection, there are several suffixes and sets of suffixes that share the same or similar phonetic shapes with intransitive resultatives. For that reason, it will be necessary to review generally these *-Vm* suffixes and to differentiate them from each other.

5.1.1 Probable *-Vb* Suffixes listed as *-Vm* in Colonial Tzotzil: Locational Nominalizers

The *-Vm* suffixes present additional problems in Colonial Tzotzil because the original Santo Domingo Zinacantán dictionary very often does not distinguish clearly between /b/ and /m/, especially at the end of words. In most cases, the compiler writes *-m* even though one would expect *-b*. Sometimes he writes an expected *-b* (or a *-v* for *-b*) if the next letter is a vowel, whether it be in the same word, the same compound word, or the following word. In the Tzotzil-English section of his dictionary, Laughlin (1988) has usually corrected this orthography based upon his judgment of what the suffix should be. For the most part, Laughlin’s analysis will be followed here. However, at times when Laughlin’s interpretation is not shared here, that will be noted. There are also other

entries for which Laughlin changes the vowel in the *-Vm* suffix. If the transcription used here differs from either the original or Laughlin's transcription, that will also be noted.¹⁷²

Locational Nominalizer - “place for” - “lugar para”			
Santo Domingo Zinacantán Tzotzil Colonial Dictionary			
Original	Laughlin		Meaning
<i>-em</i>	<i>-eb</i>		- place for doing something or for something to happen
Examples:			
<i>ztzomlem</i>	<i>tzobleb</i>	n	cattlepen - majada donde se recoge o duerme el ganado [area where cattle gather and sleep]
<i>zvayem</i>	<i>vayeb</i>	n	[same meaning as previous word]
<i>zconlehm</i>	<i>kunleb</i>	n	[same meaning as previous word]
<i>yechem</i>	<i>ech'eb</i>	n	ford - pasadero, lugar por do[nde] pasan [passage, place through which one can pass]
<i>chanem</i>	<i>ch'anob</i> [<i>*chaneb</i> ']	n	stone on which they performed sacrifices - piedra sobre que sacrificaban
(Adapted from Laughlin 1988)			

Figure 180. Colonial Tzotzil suffix used as locational nominalizer

There are three general sets of suffixes that all regularly end in *-Vm* in the original Santo Domingo Zinacantán dictionary although one would expect a *-Vb* suffix. Laughlin usually changes these suffixes to *-Vb* instead. The first set, examples of which can be seen in Figure 180, are used when referring to locations where the actions indicated by the stems are performed or happen. The Spanish compiler transcribes this suffix as *-em*.

¹⁷²Some other orthographical differences both within the original text, between Laughlin's orthography and that of the original, and between the orthography used here and that of both dictionary versions may not be explicitly noted if it would not lead to a difference in interpretation. For example, the original text alternates between *c* and *tz* to write what is *tz* in the orthography of the ALMG that is being used here. Also, the original text seldom distinguishes between glottalized and unglottalized consonants. Laughlin has made these distinctions in his text and his rendition has been followed in those cases even when citing the original Spanish-Tzotzil text. Another change made regularly is the substitution of *j* for *gh* because /j/ is the intended phonetic value. These changes will not necessarily be directly noted or commented upon in the text.

Laughlin interprets it instead as *-eb*. The comparable suffix in Modern Tzotzil is also *-eb* (cf. Laughlin 1975).¹⁷³

Instrumental Nominalizer - “instrument for doing something”			
Santo Domingo Zinacantán Tzotzil Colonial Dictionary			
Original	Laughlin	Meaning	
<i>-om, -am</i>	<i>-ob, -ab</i>	- instrument for doing something (Colonial Tzotzil: <i>-ob</i> ' on monosyllabic roots; <i>-ab</i> ' on polysyllabic roots (modern Tzotzil has only <i>-ob</i> ')	
Examples:			
<i>julom</i>	<i>julob</i>	n	chisel - escoplo
<i>yolom</i>	<i>yalob</i>	n	arrow - frecha ó flecha
<i>tighom</i>	<i>tijob</i>	n	hammer - martillo
<i>julvanam</i>	<i>julvanab</i>	n	lancet - lanceta de sangrador 961/712
(Adapted from Laughlin 1988)			

Figure 181. Colonial Tzotzil suffixes used as instrumental nominalizers

5.1.2 Probable *-Vb*’ Suffixes Listed as *-Vm* in Colonial Tzotzil:

Instrumental Nominalizers

Similarly, there is a set of suffixes that derives instrumental nouns from transitive verbs, some examples of which can be seen in Figure 181. For root verbs in Colonial Tzotzil, Laughlin interprets the suffix as *-ob*’ and for derived verbs as *-ab*’ although the Spanish compiler regularly writes *-om* and *-am*. In Modern Zinacantan Tzotzil, the comparable suffix for instrumental nouns whether derived from root or derived stems is

¹⁷³In the case of *ch’anem*, Laughlin (1988:196) changes it to *ch’anob*, but this is not likely and is probably just an oversight on his part. It is clear that *ch’aneb*’ is a “place where something happens” and so should take *-eb*’ instead of either the *-ob*’ (instrumental) or the *-em* suffix that the original dictionary has. A further argument in favor of this is the original’s *xechanebil ton* which Laughlin changes to *ch’anobil* in reference to Colonial Tzeltal’s (Guzmán 1620:160) *chanibal ton*, both meaning “stone on which sacrifices were performed.” But as we have already noted, Tzeltal, unlike Tzotzil uses an *-ib*’ suffix instead of *-eb*’ to indicate “place or location where something happens.” In general, it seems that making minimal changes and assuming regular patterns in the original produces the most accurate results.

-ob', ending in -b' and not -m, for example *anob'* "axe, chisel, hammer" (Laughlin 1975:45).

Tzeltal Suffixes			
a.	<i>ib</i>	"instrument/place"	Fairly productive
	<i>ib</i> and <i>ojib</i>		
	<i>ojib</i>	with transitive and positional roots	
	<i>ib</i>	with intransitive roots and with derived transitive and intransitive stems	
		Derives noun stems from transitive and intransitive stems, radical and derived	
b.	<i>ab</i>	"instrument"	Nonproductive
	<i>Hab, ab, ub, ob</i>		
	- <i>Hab</i> with <i>tek'</i>	"standing" or with P roots	
	- <i>ub</i> with <i>hach'</i>	"to scratch"	
	- <i>ob</i> with <i>k'ay</i>	"to sing"	
	- <i>ab</i> elsewhere		
		Derives noun stems from transitive roots, positional roots, and derived transitive stems	
(Adapted from Kaufman 1971:74-75)			

Figure 182. Tzeltal suffixes used as instrumental and locational nominalizers

It is important to note that there are also similar suffixes which perform the same functions in Tzeltal, although they are not nearly as regular in their application. Figure 182 shows a summary of Kaufman's (1971:74-75) identification and analysis of these suffixes. Although the vowels of the -*Vb'* suffixes in Tzeltal differ somewhat from those used in Tzotzil, and there is also more crossover between instrumentals and locationals in Tzeltal, all of the comparable suffixes end in the consonant /b/ and not /m/. So with the additional evidence from Tzeltal and Modern Tzotzil, it is likely that Laughlin's judgment is correct that the instrumental and locational suffixes actually end in -b and not in -m as recorded in the original Santo Domingo Zinacantán dictionary. As such, these particular suffixes are not a direct target in this investigation of -*Vm* suffixes except for possible isolated disagreements with Laughlin's analysis.

Verb Derivation: Inchoative - “become . . .”

Santo Domingo Zinacantan Tzotzil Colonial Dictionary

Original	Laughlin	Meaning
-im, -um	-ib, -ub	- intransitive verb derivation - inchoative/versive
Examples:		
<i>etz'i'um</i>	<i>tz'iub</i>	iv become a sinner - obstinado en mal [cf. <i>tz'i'</i> “dog”]
<i>xetzatzum</i>	<i>tzatzub</i>	iv be given a rest, become difficult or strong, become stale
<i>xeyihum</i>	<i>yijub</i>	iv grow hard, become strong, harden, sprout
<i>xkojim</i>	<i>kojib</i>	iv become tame (animal) 1) amansar o reposar animal; 2) manso hacerse así

(Adapted from Laughlin 1988)

Figure 183. Colonial Tzotzil suffixes used to derive inchoatives**5.1.3 Probable -*Vb*’ Suffixes listed as -*Vm* in Colonial Tzotzil: Inchoatives**

It is also important to identify and isolate another set of suffixes shown in Figure 183. These derive inchoative verbs, also known as ingressives, versives, and verbs of becoming, from nouns and adjectives. Although the Spanish original writes these suffixes as -*Vm*, both members of the set, -*ib*’ and -*ub*’, end in /b/ in modern Tzotzil (Laughlin 1975)

Tzeltal Suffixes{*ub*} ‘intransitivizer: ingressive’ Productive-*Hub*, -*Hu*, -*ub*, -*u*

Derives iv stems from noun and adjective stems, radical or derived, from one P root, and one uc

Examples:

(a) with adjectives

p'ih ‘intelligent’ > *p'ih ub* ‘to get smart’*ch'in* ‘small’ > *ch'in ub* ‘to diminish’(b) with nouns '*ahan* ‘roasting ear’ > '*ahan ub* ‘to get ripe (of an ear of corn)’

(c) with P

hoch ‘empty’ > *hoch Hub* ‘to grow empty’*poc* ‘numb’ > *poc ub* ‘to get numb’(d) with *ucyak* ‘drunken’ > *yak ub* ‘to get drunk’

Adapted from Kaufman 1971:59-60

Figure 184. Tzeltal suffixes used as inchoatives (“ingressives,” “versives”).

Kaufman (1971:59) attests variations of *-ub'* for Tzeltal as shown in Figure 184. Kaufman (1972:142) further reconstructs both *-ib'* and *-ub'* for Proto-Tzeltal-Tzotzil. Laughlin (1988) substitutes *-ib'* and *-ub'* for the *-im* and *-um* of Colonial Santo Domingo Zinacantán Tzotzil. Again, I agree with this analysis except for some disagreement with the analysis of certain individual entries. So these two suffixes are also not central to the current discussion of *-Vm* suffixes despite their superficial resemblance to them in the original Santo Domingo Zinacantán Dictionary..

Santo Domingo Zinacantán Tzotzil Dictionary			
Gerunds in <i>-om</i> used as agentives			
a) Derived from transitive roots by <i>-om</i>			
<i>pak'om</i>	agn	plasterer	
<i>yalom</i>	agn	archer	
<i>t'ujom</i>	agn	chooser, elector	
<i>jchuk'om</i>	agn	laundress, washer	
b) Derived from antipassive stems derived by <i>-j</i> from transitives derived by <i>-V</i> from nouns or adjectives			
<i>tz'ibajom</i>	agn	painter, scribe	
<i>chabjom</i>	agn	cultivator	
<i>alajom</i>	agn	bearer, principal Goddess	
<i>vayajom</i>	agn	sorcerer, witch	
c) Derived from stems in <i>-in</i> derived from nouns.			
<i>pitz'nom</i>	agn	person who plays ball with the buttocks	
<i>p'osinom</i>	agn	handball player	
<i>k'abnom</i>	agn	person who urinates, urinator.	
<i>ikatzinom</i>	agn	porter, bearer (<i>zcatznom</i> . carga)	
<i>satinom</i>	agn	marksman (acertador asi)	
d) Derived from verbs derived by <i>-an</i> .			
<i>'alnom</i>	[agn]	woman who has given birth; cow (or) mare, etc. that has given birth (Laughlin analyzes it instead as “n5”)	
<i>tza'nom</i>	agn	person covered with [excrement], (merdoso)	
(Adapted from Laughlin 1988)			

Figure 185. Colonial Tzotzil suffix *-om* used to derive agentives from various stems

5.1.4 Agentive Nominals in *-Vm* Derived from Various Roots

With the *-Vb* suffixes removed from discussion, we will now compare and contrast several sets of suffixes in *-Vm* that appear in the Colonial Santo Domingo Zinacantán dictionary with various *-Vm* suffixes in Tzeltal, Tzotzil, and Classic Period Ch'olan. We will concentrate specifically upon suffixes of the shape *-om* and *-em*.¹⁷⁴ One of the most common sets in Colonial Tzotzil is that in *-om* which is used to derive nominals in the form of gerunds that serve a specific purpose, that which is called “agentive.” Some examples of these constructions derived from various stems are shown in Figure 185. The term “agentive” is used for nouns that indicate agency, usually referring to a person who has the ability, duty, or task of performing a certain action. They can also refer to non-human beings or even non-animate forms although such usage is much less likely. In English, comparable suffixes would be “-er” or “-or” as in “singer” or “advisor.” In Spanish, the usual suffix is “-or” as in “regidor.”

There are a number of ways to form agentives in Tzotzil and Tzeltal. Often, several different ways to do so are attested for the same word root although not for the same stem. For example, for the Spanish word “escribano” “writer” the Santo Domingo dictionary has *jtz'ib'*, *jtz'ib'ajel*, *tz'ib'ajom*, and *jtz'ib'ayvanej*. **All** of these agentives are **based upon nominal stems** whether as roots, as in the case of *jtz'ib'*, or as derived gerunds as in the case of the remaining three. Two of these three *jtz'ib'ajel* and *tz'ibajom* are derived as nouns from antipassives in *-a-j* by *-el* and *-om* respectively. The remaining one *jtz'ib'ayvanej* is derived as a noun from an antipassive in *-van* by *-ej*. Although those derived with *-om* can appear prefixed with what is called the agentive prefix *(a)j-* they are the only ones of this particular group that regularly serve as agentives without that prefix.¹⁷⁵

¹⁷⁴There are others especially in *-im* and *-am*, noted, for example, by Kaufman (1972) for Proto-Tzeltal-Tzotzil. However they are not directly relevant to this discussion.

¹⁷⁵Laughlin (1988:104) notes there are other agentives in *-vil* such as *ch'ub'avil* “official builder” that never occur with the *j-* agentive prefix in the Santo Domingo dictionary.

Agentives in *-o'm* (or *-om* if one does not accept Lacadena and Wichmann's (2004) spelling rules) occur in the Classic-Period Ch'olan texts as well. Figure 186 illustrates several of them including *mako'm* "opener," *kayo'm* "fisher," and *k'ayo'm* "singer." These examples from the inscriptions reveal that just as agentives can be derived from root and derived nouns by prefixing various forms of the agentive *aj-* prefix, so also can *-o'm* serve what seems to be the same purpose. While *kayo'm* in the glyphic example is derived from a noun root by *-o'm*, *mako'm* is derived from a transitive verb root. The versatility of the *-om* gerund suffix in deriving agentives from various roots is evident in Tzotzil as well.

The examples in the first group of Colonial Tzotzil agentives, in Figure 185a are all derived directly from transitive verb roots. *Yal* is a strongly transitive verb root meaning "to throw." The reference to "arrows" instead of to "spears" is a much later innovation in meaning. *T'ujom* is based upon *t'uj*, a transitive verb meaning "to choose." The verb *pak'*, upon which *pak'om* "plasterer" is based, is a transitive verb meaning "to plaster." It can only become intransitive through the addition of an additional derivational suffix such as, for example, *-av* (*-aw*).

The second set of agentives, in Figure 185b, is formed instead from intransitive stems. The original noun or adjective is transitivity by suffixing a vowel, *-a* in all these

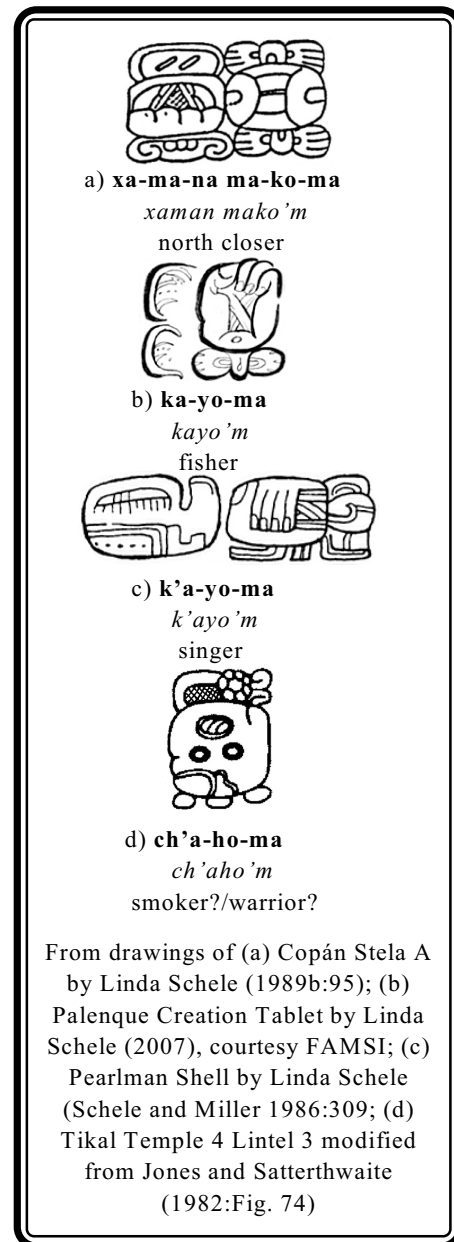


Figure 186. Some Classic Ch'olan agentives in *-o'm*

examples. The resultant transitive verb is then suffixed by *-j* creating an intransitive verb, specifically, an antipassive. That preserves the active connotation of the verb while obviating the need for an object. The agent and the activity that the agent performs are retained. Finally, the *-om* suffix nominalizes the antipassive verb allowing its use as an agentive as in *tz'ib'ajom* “writer, painter” and *chab'jom* “cultivator.” It is important to note that the derivational path of these forms has a definite effect upon the meaning of the final word. We have already discussed the transitive verb *chab'i* meaning “to guard, oversee, govern.” Although it is derived ultimately from the same noun *chab'* “earth, land, field,” its meaning is quite different from *chab'aj* the derived intransitive “to cultivate” upon which the agentive *chab'jom* “cultivator” is based. In this case, the vowel of the derivational suffix *-aj* is elided when the stem is further suffixed.

The third set, Figure 185c, is formed by suffixing *-om* to a stem ending in *-in* which derives a verb from a noun. In most cases, the stems with *-in* used to form agentives are also attested as derived intransitive verbs in the Santo Domingo dictionary. However, *-in* is also used to derive transitive verbs from nouns forming what Haviland (1988:85) calls a usitative meaning “to use something as.” Kaufman also reconstructs for both suffixes for Proto-Tzeltal-Tzotzil. One *-in* suffix derives transitive verbs from nouns and another derives intransitive verbs from nouns, positional roots, and transitive roots. Sometimes semantic evidence can help determine whether an intransitive or transitive stem was used to form the agentive noun. For example, *ikatz* (*ikatzil*) is a noun root meaning “bundle, burden, pack” and the Colonial Tzotzil dictionary attests *ikatzinom* as “él que lleva carga” “one who carries cargo” (Laughlin 1988:675). As an intransitive verb, *ikatzin* means “hacer carga” “to prepare the cargo.” Although that meaning is clear enough to lead to an agentive meaning “porter” or “pack horse” (*ikatzinom caballo*), the modern San Lorenzo Tzotzil dictionary does attest the transitive usitative *ikatzin* “to carry a burden.” So one could justifiably conclude that even in the Colonial period, the transitive usitative stem was used to form the agentive in *-om*.

Despite this variation, almost all of the agentive forms in the third set are accompanied in the Colonial dictionary by an intransitive verb derived by *-in* whose meaning fits well with that of the agentive. Thus *pitz'in* “play ball with the buttocks” (“jugar a la pelota con las nalgas”) is an intransitive verb derived from the noun *pitz'* meaning a “ball” used in a game that is “played with the buttocks.” In turn, *pitz'nom* refers to a ball player of that sort. Similarly *p'osin* “play handball” is an intransitive verb derived from *p'os* “handball.” “Handball player” is then *p'osinom*. Besides the original entry for this verb being clearly inflected as an intransitive *xep'osin*, *p'os* itself also occurs as a transitive verb with the same basic meaning (Laughlin 1988:949). For that reason, it is not necessary to posit a transitive usitative form as its stem source. Although neither Haviland nor Kaufman classifies the intransitive verb forms derived by *-in* as usitives, the semantic effect of the derivation is quite similar to that of the transitive usitative *-in*. It forms an intransitive verb indicating the use of the suffixed noun in an activity or for a purpose.¹⁷⁶ It apparently differs only in its required inflection and its single-argument structure.

Finally, as shown in Table 185d, there are two examples of agentives in *-om* likely based upon derived verbs in *-an*. A candidate for *alnom* “woman who has given birth” is found in *'alan* a derived transitive verb meaning “give birth, adopt.” The intransitive verb *tza'an* “purge” is a likely candidate for *tza'nom* “full of [excrement],” “merdoso.”

All of these agentives represent what are, grammatically speaking, gerunds, but they are gerunds used for a particular purpose. What is more, unlike nouns and other gerunds, they can perform this function without any further affixing. As gerunds, they represent derived nouns that encapsulate descriptions or titles especially for sentient beings and also, albeit much less commonly, for other things that have the capability of performing certain actions. Historically, these agentives have preserved the *-om* suffix intact. For example, modern Tzotzil still uses it, as exemplified in *h'alnom* (*j'alnom*) “woman who has given birth” (Laughlin 1975:68). They are also attested in the same

¹⁷⁶In fact, with examples like “ball playing,” sentences with intransitive verbs such as, “He (ball)plays,” seem as useful as “He (ball)plays that team.”

format in the Ch'olan languages. In Ch'orti' (Wisdom 1950:540) *niri* is a transitive verb meaning “cure (especially by magic).” “*Aj nirom*, then, is a “curer” (“curandero”).

Santo Domingo Zinacantán Tzotzil Dictionary			
Stative gerunds and participles in <i>-om/-em</i>			
a) Gerunds in <i>-om</i> used as nouns derived from transitive verbs			
<i>'uch'om</i>		drink (bebida)	
<i>yaxmojom</i>		[act of cultivating before the time that the plants are even tender] - (rosar antes de tiempo que aun las matas estan tiernas (aquel acto)).	
<i>tz'etom</i>		felling of upright objects (aquella obra de cortar así)	
<i>tz'isom</i>	n4d	sewing (costura) - <i>ghtzicom</i> , <i>atzicom</i> (<i>j'tz'isom</i> , <i>atzisom</i>)	[is also used as an agentive meaning <i>sastre</i> (“tailor”)]
b) Gerunds in <i>-om/-em</i> used as nouns derived from intransitive verbs			
<i>p'ilem</i>	n4f	addition (añadidura)	
<i>lajom</i> ; <i>lajem</i>		dregs, end, the last (final cosa ó postera) [Laughlin has <i>lajeb</i>]	
<i>tz'akiom</i>		last (final cosa ó postera)	
<i>tzutzem</i>	n4b	completion, end, outcome [Laughlin has <i>tzutzeb</i>]	
		(<i>ta slajem</i> , <i>ta yolanem</i> , <i>ta tzutzem</i> en fin)	
<i>tz'etom</i>		that (upright object) which is cut in that way	
		(lo cortado así. <i>tz'etbil</i> , <i>jtz'etom</i> , <i>atz'etom</i>)	
c) Adjectives/Participles in <i>-om/-em</i> derived from intransitive verbs			
<i>'ech'om</i>	aj	old, stale (añejo)	
<i>ch'iom tzeb</i>	nphr(aj & n)5	young girl 1) borrico, 2) mosuelo asi 225, cf mosuela	
<i>ch'iom caballo</i>	nphr(aj & n)5	colt (borrico)	
<i>ch'iom kelem</i>	nphr(aj & n)5	young boy or rooster.	
(cf. <i>ch'i</i>	iv	grow (crecer)	
<i>ochem ch'ak</i>		chigger (pulga) [more accurately “nigua”]	
(Adapted from Laughlin 1988)			

Figure 187. Colonial Tzotzil stative gerunds and participles in *-om* and *-em*

5.1.5 Stative Gerunds and Participles in *-om* and *-em*

There are also gerunds in *-om* and *-em* whose usage is not limited to a specific function as are agentives. Examples of these are shown in Figure 187. The first set of this group in Figure 187a represents gerunds in *-om* based upon transitive roots. The first example, *uch'om* “drink” (“bebida”), is based upon the transitive verb root *uch'* and is used as a noun. A possible intransitive verb, also *uch'*, is not a likely candidate since its

meaning is instead “to leak” “salirse el vaso.” Along with the other similar examples, this may be a holdover from Proto-Mayan in which nominals, that is, gerunds or participles, might have been formed from transitive verbs using *-o'm*. It is still present, for example, in Chontal. Knowles (1984:185) notes that “The *-om* suffix derives nominals from root and *-V(n)* derived transitives and *-s* causatives.” Keller and Luciano G. (1997:149) provide the example of *kune'* “golpear” (“to hit”) which, when suffixed by *-om*, becomes *kunom* “pelea” (“fight, scuffle”). An example from Ch'orti' (Wisdom 1950:731) is *tzupom* “any kind of hanging bag.” It is derived by *-om* from the transitive verb *tzupi* “hang or suspend a thing.” In what is a very interesting parallel, Ch'orti' also has examples of transitive roots suffixed by *-om* that can be used either as non-specific gerunds or in agentive constructions. The example *aj nirom* as “curer” has already been mentioned. But *nirom* in Ch'orti' without the agentive prefix occurs as a gerund meaning “a cure, a curing” (Wisdom 1950:540). This use of *-om* to form gerunds from transitive verbs, in this case from the transitive verb *niri*, is precisely what is exemplified in the Tzotzil examples in this set.

Also included in Figure 187a is the transitive verb *tz'et*, which in Colonial Tzotzil means “to cut upright objects such as trees” (“cortar lo que esta levantado como arboles”). The gerund *tz'etom* in turn is a derived noun, a gerund, that means “that work of cutting in that way” (“aquella obra de cortar así”). Although Laughlin changes the word to *tz'etob'*, it is likely the Spanish compiler who is right in this case. We have already noted that the suffix *-ob* is used for instrumentals in Tzotzil but that is not what the Spanish entry indicates and so is likely not what is meant here. Although Laughlin does often analyze the agentive gerunds as nouns, he rarely acknowledges non-agentive gerunds as such. That may have been what led to his modification of the original.

The next example, *yaxmojom*, is not included in the main sections of Laughlin's Colonial Tzotzil dictionary but only in a list of “Undetermined Words” at the end of Volume 1 (Laughlin 1988:345). But both the form and the meaning make it quite clear that it is a compound word consisting of the adjective *yax* “first, early, green” and the

gerund form of the transitive verb *maj/moj* “cultivate, thresh, flail.” The Spanish meaning given is “rosar antes de tiempo que aun las matas estan tiernas (aquel acto)” that is, “the act of cultivating before the time that the plants are even tender.” While the connotations of the root include a reference to harvesting, the context here points instead to cultivating around the very young corn plants or sprouts. At any rate, *mojom* is indeed another non-agentive gerund derived by *-om* from a transitive verb.

The second set of gerunds in Figure 187b consists of forms attested in Colonial Tzotzil as derived from intransitive verbs by either *-om*, *-em*, or both in different entries. The intransitive verb *p’il* means “add, increase” (“añadir, acrecentarse”) The example *p’ilem* is a good one to start with, because the meaning “añadidura,” “addition” is so clearly nominal and the stem is so clearly intransitive, not because of its meaning, but because the root requires a causative in *-es* to form a transitive with a similar meaning.¹⁷⁷

The gerund *tz’akiom* betrays its stem in a different way. While the stem *tz’ak* is attested as both transitive and intransitive, the latter probably with a passive connotation, neither one is likely the stem used to derive the gerund *tz’akiom*. Instead, the stem is *tz’aki*, which is a derived intransitive verb meaning “be complete or finished.” So *tz’akiom* means “Final cosa ó postrera” “final or last thing.”¹⁷⁸

Unlike *p’ilem*, *tz’akiom* ends in *-om* instead of *-em*. Nevertheless there does not seem to be any noticeable semantic or grammatical difference among the words derived by the two suffixes. Gerunds derived from intransitive verbs can be found with both. In fact, there are examples of both versions occurring on the same intransitive roots. One of them *lajem/lajom* is included in Figure 187b. The form *lajem* appears in entries such as “fin de cosa” (“end of a thing or matter”), “estremidad” [sic], (“end, tip”), and “finalmente” (“finally”) where it occurs as the object of a preposition *ta lajem*. This is

¹⁷⁷In the Spanish section of the Santo Domingo Zinacantán Tzotzil dictionary, Laughlin (1988:667) changes *sp’ilem* to *sp’ileb*. However, in the Tzotzil-English section, the same entry is reproduced with an *-m* as *p’ilem*. This inconsistency may simply be the result of an oversight.

¹⁷⁸The original dictionary has the entry: “Final cosa ó postrera, *ztzaquiom tzaclom, tzaclom*” Laughlin (1988:910) omits this entry from the Spanish-Tzotzil and the Tzotzil-English section of his dictionary. *Tz’aklom* is included as *tz’aklon* based upon other entries. This is one of several examples of gerunds in *-om* that are either omitted or modified in various ways by Laughlin.

literally “in/at the end” and so also a gerund with the meaning “end” (cf. Laughlin 1988:902, 910).¹⁷⁹ But it also occurs as *lajom* in the entry “agotamiento ó acabamiento. *xulem, jlajom, alajom*” (Laughlin 1988:780) (“end, completion, exhaustion”). In all of these contexts it is a gerund based upon an intransitive verb root “to end, die, wear out.”

So how is this difference to be explained? In modern Tzotzil, most gerunds based upon intransitive verbs are derived with *-em*. This change from *-om* to *-em* began some time before the data for the Santo Domingo Zinacantán Tzotzil dictionary was gathered. The dictionary reflects a time in the midst of that particular change. We do not know how the data was gathered or whether different people were involved both in providing the data and gathering it, or even how long a time span the examples cover. All of these factors and more could have played a role in the final product. However, that the change from *-om* to *-em* for deriving gerunds from intransitive verbs had already begun is quite evident.

It should be pointed out that Laughlin changed almost all the examples of *lajem* and *lajom* to *lajeb’*. *Lajeb’* is used often in numerical contexts since *laj* is the word for 10 and *-eb* is the suffix used on ordinal numbers. “The tenth” is written as *lajeb’*. Laughlin (1975:203-204) also records *laheb* (*lajeb’*) as the word for “end” in the ritual speech of modern Tzotzil. However, for Colonial Tzotzil, Laughlin changes *-em* to *-eb’* for several other verbs with a similar meaning that are not used in numeric contexts and are apparently not necessarily connected to ritual contexts in Colonial Tzotzil. One example of this is the word *tzutzem* also shown in Figure 187b and included in some of the same original entries along with *lajem*. As has already been noted, *-eb’* is otherwise used to derive nouns referring to a particular place. In Tzeltal, as noted by Kaufman, it is also used to derive instrumental nouns. But neither of those options seem likely here. In the end, the best option and one that makes immediate sense, is to leave the original entries as they are. That leaves us with gerunds such as *lajem*, *lajom*, *tzutzem*, *lok’em* and others as derived from intransitive roots and stems by *-em* and *-om*.

¹⁷⁹*Lajem* in this context is another example for which I keep the original dictionary’s *-em* suffix while Laughlin changes it to *-eb*.

The last example of this set is *tz'etom*. Although a *tz'etom* was also included in the first set of gerunds derived from transitive verbs, this one, although superficially the same, is actually derived from an intransitive verb. Although there is no intransitive verb *tz'et* recorded in the Santo Domingo Zinacantán dictionary, there is one recorded by Laughlin (1975:102) in his San Lorenzo Zinacantán dictionary of Modern Tzotzil. The assigned meaning is “be cut down.” This is likely another example of what is a derived intransitive verb, specifically, in this case, a passive, which has been analyzed or, at least, labeled as simply an intransitive. Although in Tzotzil such verbs are most often not otherwise marked, they do frequently retain an infix *-h-* in the Ch'olan languages although they are inflected as root intransitives. There are examples of such intransitive verbs in Classic Ch'olan as well, among them one of the most frequently occurring verbs in the entire monumental corpus, *'u-ti u(h)ti* “to happen, occur.” It was originally derived from the Western Mayan transitive verb *ut* “do, say” a meaning that it still carries in Tzotzil and Tzeltal.

Besides noting their assigned meanings, one of the ways to detect gerunds derived from intransitives in the original Santo Domingo Zinacantán dictionary, is by their being included as synonyms in the same entries as gerunds derived from transitives by the passive *-b-* suffix and then further nominalized by *-il*. That is precisely what has been done by the Spanish compiler for this entry and for some other similar gerunds. Since the semantic overtone of the stem is passive, these gerunds in *-om* or *-em* also have passive connotations. What is especially interesting here is that both the gerunds based upon the transitive stem and the intransitive stem are included in the same listing. For that reason, the whole entry has been reproduced (with minor orthographical modifications and the Spanish translated) in Figure 188.

Cortar lo que esta levantado como arboles, *jtz'et*. Lo que así estoy cortando, *jtz'etøj*, *atz'etøj*, lo cortado así, *tz'etbil*, *jtz'etom*, *atz'etom*, aquella obra de cortar así, *tz'etom ut batik ta tz'etom*, *ayom ta tz'etom*. (Laughlin 1988:834)

To cut that which is upright such as trees: *jtz'et*. That which I am cutting in that way: *jtz'etøj*, *atz'etøj*. That which is cut in that way: *tz'etbil*, *jtz'etom*, *atz'etom*. That action (work) of cutting in that way: *tz'etom*; from which (whence): *b'atik ta tz'etom*, *ayom ta tz'etom*.

Figure 188. Comparison of some nominals derived by *-om* with those derived by *-b'il* in Colonial Tzotzil.

As is usual, gerunds are shown possessed by the 1st and 2nd person singular ergative dependent pronouns. So the relevant portion translated completely into English would be “that which is cut in that way, cut upright thing” (*tz'etb'il*), “my cut upright thing” (*jtz'etom*), “your cut upright thing” (*atz'etom*). These two examples of *tz'etom* are both derived from the intransitive verb *tz'et* “to be cut.” The next occurrence of *tz'etom*, however, has a substantially different definition: “the action (or “work”) of cutting in that way.” It is, to be sure, a gerund, but it refers to the activity of cutting the upright thing and not to the upright thing itself. That is because it is based upon the transitive root instead.¹⁸⁰

The third set of forms derived by *-om* and *-em* shown in Figure 187c comprise adjectivally used participles. Again, just as with the gerunds derived from intransitive

¹⁸⁰Here Laughlin changes all three occurrences of *tz'etom* to *tz'etob'*. Needless to say, I do not agree with those changes. In this case, it makes the underlying differences in the two clauses, that of the transitivity or intransitivity of the stems derived with *-om*, hard to understand or justify. There is otherwise little or no evidence that *-ob'* could derive the two semantically different gerunds. Normally, *-ob'* would be used to derive instrumental nouns. In fact, *tz'etob'* would normally denote an instrument for cutting upright things and is attested as such in modern Tzotzil. *Tz'etob' te'* is defined by Laughlin (1975:102) as “axe, sickle.” But he also has included *tz'etob'* as referring to a “medium to large tree being felled or having been felled when land is cleared” and *tz'etob'tik* as “expanse of forest underlying an area suitable for corn farming.” More in-depth investigation of modern Tzotzil would be necessary for me to reach a conclusion, but my hypothesis now is that some forms in *-om* and *-em* have evolved into *-ob'* and *-eb'* over the last 500 years. Such variation between /m/ and /b/ is known from many languages. The Santo Domingo Zinacantán dictionary compiler, as we have seen, did not always distinguish between *-Vm* and *-Vb'*, but diachronic and comparative investigation aided in making the distinction. The question remaining is whether in some cases *-Vm* changed to *-Vb'* by the time and in the place where the San Lorenzo Zinacantán dictionary was compiled by Laughlin.

verbs, both suffixes occur. The first example of the set is *'ech'om* which is a participle that serves as an adjective meaning “old, stale” (“añejo”). The sense of this adjective comes from the intransitive verb *'ech'* with a range of meanings including “be digested, exceed, go through streets or gardens, pass by, surpass (Laughlin 1988:50). Historically, this adjective, derived from an intransitive verb by *-om* shares a characteristic of others in the same class of adjectives. It has retained the *-om* suffix in current Tzotzil languages (cf. Delgaty and Ruíz Sánchez 1978:58; Laughlin (1975:140).

The second example in Figure 187c, *ch'iom*, is also a participle derived by *-om* and has retained that shape into current times (cf. Laughlin 1975:133). It is derived from the intransitive verb *ch'i* meaning “to grow” (“crecer”). Although Delgaty and Sanchez classified *ech'om* as a “past participle,” that “past time” quality likely came from the meaning of the verb *ech'* “pass by” rather than from the suffix *-om*. Instead, the examples such as *ch'iom tzeb'* “young girl” and *ch'iom caballo* “colt” indicate instead that in this case, the sense is more current. The most accurate translation, if one wished to reproduce its more literal sense in English, would be as a present participle “growing.” So literally, *ch'iom caballo* “colt” would be a “growing horse.” In each case, the participial quality of the word has receded as its adjectival quality has advanced, leaving them to appear more as simple adjectives rather than as derived participles.

The third example of participles derived from intransitive verbs is *ochem*. This participle, although derived with *-em* instead of *-om* is alike in other relevant details to the two examples derived by *-om*. It occurs in the dictionary in the name of a particular type of biting insect, a chigger. *Och* is an intransitive verb meaning “to enter.” *Ochem* in turn is a stative participle used as an adjective. In the combination “*ochem ch'ak*” it refers to an “entering,” “cutting” insect, specifically a chigger. While Laughlin (1988:80,151) classifies *ochem* here as an “ajpp,” “adjective, passive participle” according to his list of abbreviations, classifying it instead as a stative participle seems more apropos. The sense is not that the insect has entered, but that it is entering, that is “an entering cutter” instead of an “entered cutter.” It is also not a transitive verb and so could not be a “passive”

participle. *Ok/och* and its reflexes are root intransitive verbs throughout the Mayan languages (cf. Kaufman 2003:1318). Just as in the case of the other examples, this adjective has remained intact and is attested in modern Tzotzil as well as in Tzeltal (Slocum et al.:1999:35).

Intransitive resultative in -om

Original Santo Domingo Zinacantán Tzotzil dictionary entry:
 . . . aquella obra de cortar así [lo que està levantado como arboles], *tz'etom ut batik ta tz'etom, ayom ta tz'etom.* (Laughlin 1988:834)

Laughlin's analytical entry:
tz'etob n5 felling of trees. .
 battik ta '**ayem** ta *tz'etob*. He went to fell trees.
 tz'etob Let's go fell trees. (Laughlin 1988:179)

Suggested modification of Laughlin's entry to better match the original:
tz'etom vn cutting of upright objects.
 ayom ta *tz'etom*. He is/was [in the state of] cutting down trees
 b'at[t]ik ta tz'etom Let's go felling ("in cutting down") trees.

Figure 189. Colonial Tzotzil intransitive resultatives in -om

5.1.6 Intransitive Resultatives in -om and -em

In reviewing earlier the examples of transitive verbs inflected for the resultative aspect, it became clear that most of the examples were reflexives. If not for that characteristic, aspectual inflection occurring on verbs is not commonly found in dictionary entries, and this Colonial dictionary is no exception. Because intransitive verbs do not take objects, reflexives cannot occur with a set made up of intransitive resultatives. For these reasons, the dearth of intransitive resultatives in the Santo Domingo Zinacantán dictionary is not surprising. Inflectional suffixes are usually described and discussed in grammars instead. For example, in his modern Tzotzil dictionary, Laughlin (1975:25) includes -em, the “perfective of iv” (which he otherwise calls the “stative,” e.g. Laughlin 1975:30-31) in a list of affixes that were not included at all in the body itself unless they “provided unexpected meanings.” In fact, **I have not**

located any actual intransitive resultative examples in the modern San Lorenzo Zinacantán dictionary proper at all, but rather **only in the grammatical introduction**.

That can surely not be considered a reason to deny their existence which is otherwise amply attested, for example, in Smith's (1999) Tzeltal grammar introduction as well as in Haviland's (1999) Tzotzil grammar. Haviland (1988) also includes *-om* as a resultative (his "stative" or "STAT") aspect suffix for Colonial Tzotzil.

Since the suffixes used for deriving adjectives and nouns from intransitive verbs, *-om* and *-em*, are structurally the same as those used for intransitive resultatives, one can only distinguish them in context. In word lists, it is the derivational affixes that are of immediate importance because they can change the specific meaning of a word and also because they can be used as stems to derive new words. That is why many entries, such as those in Figure 187b and Figure 187c, which are listed as either participles or gerunds, that is, either verbal adjectives or verbal nouns, could be intransitive resultatives based upon form alone.

Figure 189 includes an example of an intransitive verb inflected for the resultative aspect. Here *ayom* occurs in what is actually one of two sample sentences provided to explain how the gerund *tz'etom* is used in context. Figure 188 already contains the two relevant sentences: *b'atik ta tz'etom*, *ayom ta tz'etom*. Laughlin (1988:179) translates them as "He went to fell trees" and "Let's go fell trees." The first thing to note here is that both of the sentences begin with an active verb. Although not stated expressly by him, *b'atik* is interpreted by Laughlin as "*b'attik*," the first person plural imperative form meaning, "Let's go" *Ayom*, which he changes to *ayem*, is interpreted by him as an intransitive verb in the stative aspect. As has already been discussed in detail, it is sometimes difficult to translate resultatives precisely into English and Laughlin's "He went . . ." is fine since it captures a good portion of what the intransitive resultative connotes although it lacks some connotations of the original. As we have seen, the simple past tense is one of the options for translating resultatives in the Classic Ch'olan texts as well. However, one could also translate it as "He/She has gone to fell trees," or,

more accurately, “He/She **is gone** felling trees.” Which of the three translations would best capture the sense could only be decided after being provided more of the context in which the particular sentence was uttered or written. The last is likely the closest option. An even more literal rendition would be “He/She is/was in the state of felling trees.”

While accepting Laughlin’s interpretation of this sentence, I do not agree with his decision to change the original text to *ayem*. Instead, I agree with Haviland (1988:85) that *-om* is used as a resultative inflectional suffix in Colonial Tzotzil and so the original should not be changed. As Haviland indicates, the intransitive resultative inflectional suffix parallels that of the gerund and participle suffixes for intransitives. The suffix *-om* has tended to change to *-em* over time in Tzotzil. However, unlike some gerunds formed from intransitive stems, it appears that intransitive resultative suffixes in *-om* are no longer attested at all in modern Tzotzil. This situation is understandable since, as already noted, individual derived adjectives or verbs may retain their older shapes indefinitely when they become reinterpreted as individual words with their own specific meanings. The derivational pattern which produced them may become unproductive, but the previous meaning may remain “attached” to the old form of the word. For example, this seems to happen often in Tzotzil and other Mayan languages in names of plants. However, inflectional suffixes such as that of intransitive resultatives, unless affected by specific phonetic contexts, tend to change for all stems at the same time (although not necessarily at the same time in all areas where the language is spoken). That is why the intransitive resultative *-em* suffix has replaced all occurrences of *-om* in modern Tzotzil while instances of *-om* for individual derived gerunds and participles still remain, for example, in *ech’om*.

In his Colonial dictionary, Laughlin includes several other entries which contain what he analyzes as examples of intransitive verbs in the stative aspect: “iv/stat.” Several of his entries are shown in Figure 190. He identifies the first one, in Figure 190a, as *biinem* “famous.” However, the original Spanish has *binom* instead. *B’iil* “name” or *b’i* when possessed as in *sb’i* “his/her name” is a somewhat irregular root. As *b’iin*, it could

a) Laughlin 1988:			
<i>biinem</i>	iv/stat/.	famous. esclarecido	(1988:166)
Original:			
esclarecido	<i>binom</i> ,	<i>aybil</i> , <i>nabil</i> , <i>biiltasbil</i>	(1988:892)
Revised analysis:			
<i>b'iinom</i>	part/aj	famous, well-known	
b) Laughlin 1988:			
<i>kojem</i>	iv	tame (domestic deer) RML – one assumes this is the stative form of an intransitive verb.	(1988:221)
Original:			
manso animal, como venados domesticos.	<i>kojem</i>		(1988:978)
Revised analysis:			
<i>kojem</i>	gerund	tame animal, such as a domestic deer.	
c) Laughlin 1988:			
<i>lajem</i>	iv/stat/	used up, worn out	(1988:241)
Original:			
agotado ó acabado	<i>e'ul</i> , <i>ulesbil</i> , <i>lajum</i>		(1988:664,780)
Revised analysis:			
<i>lajub'</i>	inchoative	become finished, be ended	
d) Laughlin 1988:			
<i>balem chin</i> ,	s:iv/stat/ & n5.	mangy,	sarnoso.
<i>balem ch'ich'</i> ,	s:iv/stat/ & n5.	bloody,	sangriento.
Original:			
sarnoso, <i>chim</i> , <i>chin</i> , <i>valonchin</i> , <i>chinchintic</i>			(1988:1078)
sangriento, <i>valon chich</i> , <i>atinegh chich</i> vide ensangrentar ensangrentado)			(1988:1077)
Revised analysis:			
<i>b'alon chin</i> ,	iv (or aj) + 1 st abs & n.	mangy,	sarnoso
<i>b'alon ch'ich'</i>	iv (or aj) + 1 st abs & n.	bloody,	sangriento.

Figure 190. Revised analysis of some forms classified as intransitive statives (resultatives)

be either a transitive or an intransitive verb. Here, Laughlin seems to interpret it as intransitive, presumably derived by the *-in* intransitive suffix. However, it could also be a transitive verb derived from the nominal root by the usitative *-in* suffix since Laughlin (1975:82) analyzes *b'iin* as a transitive verb in his modern San Lorenzo Zinacantán Tzotzil dictionary. Here he must be interpreting it as intransitive based upon his analysis of it as an intransitive resultative (“iv/stat”).

But the Spanish compiler seems to consider it a participial form with the meaning “esclaricido” (“illustrious, prominent”). Evidence of that also comes from the forms that he lists as semantically comparable to it. They are all passive participles/gerunds in *-b’il* including one derived ultimately from *b’i*, *b’iiltasb’il*. Although forms in *-b’il* can also be used in resultative constructions of their own, they, along with *b’iinom* are listed and analyzed here by the Spanish compiler as participial adjectives and not as resultatives. Finally, even if this were an intransitive resultative, it would be one in *-om* and not in *-em*. That the Colonial Santo Domingo dictionary compiler does not always clearly distinguish between /m/ and /b/ has already been acknowledged. There is also some crossover between /v/ and /b/ and between /m/ and /n/. However, the vowels that he employs in his listings are, for the most part, quite accurate.

In the next example from Figure 190b, Laughlin (1988:221) notes about *kojem* that “one assumes this is the stative form of an intransitive verb.” In other words, he believes that analyzing *kojem* as an intransitive resultative is the most appropriate interpretation of that form. It is true that the original entry indeed reflects an *-em* suffix and that the *-em* suffix is used in modern Tzotzil for inflecting intransitive resultatives. But *-em* is also used in modern Tzotzil for deriving gerunds and participles from intransitive verbs and, in Colonial Tzotzil, it shares that responsibility with *-om*. The Spanish compiler’s entry indicates by his definition that he is referring to a nominal “manso animal,” in other words, a “tame animal.” So the most likely conclusion here is instead that *kojem* is a gerund derived from the intransitive verb *koh* meaning to “tame,” “to have power over,” or “to be over.”

Further evidence comes from the entry *kajib’* which is a derived intransitive verb of becoming, an “inchoative,” meaning “become tame” (“manso hacerse así”). At the very least, since inchoative verbs can be derived from adjectives, it is likely to be based upon an adjective meaning “tame.” Modern Tzotzil (Laughlin 1975:164) does indeed have a positional root *kaj* from which many words are derived with the general connotation of “be on top of,” “mount,” “place over,” etc. As is the case in both modern

and Colonial Tzotzil, /a/ and /o/ often interchange in roots, usually without a change in meaning, and that likely explains the /o/ variation here. The close relationship between positional verbs and the adjectives that serve as their roots could then explain the derivation of the inchoative verb. There is, then, little doubt that *kojem* here represents not a verb inflected for the intransitive resultative but rather a nominalized intransitive, a participle or a gerund, with the meaning “tamed” or “tame animal.”

In the next example, Figure 190c, Laughlin classifies *lajem* as a verb inflected for the intransitive resultative, “iv/stat/ used up, worn out.” Again, I do not doubt that *lajem* or *lajom* could represent an intransitive resultative. But the question is whether that is what the form represents here in this particular context. In this case, the original Spanish attestation is neither *lajem* nor *lajom* but rather *lajum*. We have already discussed several examples of inchoatives in *-ub'* and there are several others attested in the Santo Domingo dictionary. In almost every other case, the Spanish compiler writes this suffix as *-um* instead of *-ub'* and Laughlin is quite consistent in reanalyzing the suffix as *-ub'*. If it is indeed an inchoative, its meaning would be something like “it became finished, it ended” which would indeed fit the meaning indicated in the original Spanish of “agotado ó acabado.” What is more, although a passive participial form, *ulesb'il*, is included in the original entry, it also includes a straightforward intransitive verb as well: *e'ul*. It is used, for example, in the sentence *e'ul yajvalel*. “His dominion is ended.” Both this intransitive verb and the intransitive verb *lajub'* would fit the meaning given in this entry. Otherwise, if indeed the Spanish compiler were mistaken about the vowel in the suffix, it could also have been an /o/ instead of /e/ giving *lajom*. However, the form *lajum*, and so *lajub'*, seems more likely since the original Spanish author usually distinguishes correctly among the vowels in such examples.

The last example in Figure 190d shows a pair of two closely related clauses written originally as *valon chin* “sarnoso” and *valon chich* “sangriento” which Laughlin changes to *balem chin* “mangy” and *balem ch'ich'* “bloody” respectively. In doing so, he

interprets *b'alem* in each case as an intransitive resultative or, in his terms, as a “stative” verb (Haviland’s “STAT” aspect).

a) Laughlin’s Analysis:	<i>bal ta 'ach'el</i> , vphr.tv- & qphr(pre & n5). muddy, enlodar a otro. (1988:164)
Original:	enlodar á otro, <i>ghbal ta achel</i> , <i>acatintas ta achel</i> (1988:880)
b) Laughlin’s Analysis:	<i>bal ta 'ach'el</i> , vphr:aj/pred/ & qphr(pre & n5). be muddy. enlodado. (1988:164)
Original:	enlodado, <i>balon ta achel</i> , <i>catinegh achel avatinegh achel</i> (1988:880)
	enlodado, <i>balon ta achel balbil ta achel</i> . (1988:881)
c) Laughlin’s Analysis:	<i>balem chin</i> , s.iv/stat/ & n5. mangy, sarnoso. (1988:164)
Original:	<i>sarnoso</i> , <i>chim</i> , <i>chin</i> , <i>valonchin</i> , <i>chinchintic</i> (1988:1078)
d) Laughlin’s Analysis:	<i>balem ch'ich'</i> , s:iv/stat/ & n5. bloody, sangriento. (1988:164)
Original:	sangriento, <i>valon chich</i> , <i>atinegh chich</i> vide ensangrentar ensangrentado (1988:1077)
(Adapted from Laughlin 1988)	

Figure 191. Comparison of dictionary entries for two similar clauses in Colonial Tzotzil

Before commenting on this analysis, it might be a good idea to compare these to another entry, that of *b'alon ta 'ach'el* “enlodado.” Figure 191b shows Laughlin’s analysis of this sentence along with the Spanish compiler’s original entries. Haviland (1988:91) analyzes it as a verbless sentence:

Bal-on ta 'ach'el. I am muddy. (*bal* ‘covered, rolled in’ + *-on*. ‘1st person subject’; *'ach'el* ‘mud’; hence, literally, ‘I am covered in mud.’)

As does Haviland, Laughlin includes *b'alon ta 'ach'el* as “I am muddy” in the body of the dictionary, but he does not analyze *b'alon chin* or *b'alon ch'ich'*, shown in

Figure 191c-d, in the same way. For *b'alon ch'in* and *b'alon ch'ich'*, he changes the original *balon* (*valon*) to *balem* and interprets it as an intransitive resultative. Again, if they are indeed intransitive resultatives, the change should be to *b'alom*, since the Spanish compiler occasionally writes *n* where we would expect *m* but does not normally exchange the vowel *o* for *e*, a point that has already been argued in a different context (cf. Section 5.1.5 and 5.1.6 above). But just what is the formal difference between *b'alon ta ach'el* and *b'alon ch'ich'*? Formally, the former includes the preposition *ta* and the latter does not. Without a preposition, how does one interpret *b'alon ch'ich'* in order to have it mean “sangriento” or “bloody.” Interpreted literally without a preposition, would the clause \neq *b'alon ach'el* be, “ \neq I am covered mud?” Is that why Laughlin changes *balon ch'ich'* to *balem ch'ich'* and interprets it instead as an intransitive resultative? But just how would one interpret *b'alom ch'ich'* literally otherwise? It does not seem to work as an intransitive resultative, “ \neq He is covered blood,” either. What if one interprets *b'alom* instead as an intransitive stative participle since that seems to agree with the Spanish “sangriento.” *B'alom ch'ich'* would then be “ \neq covered blood.” That would also seem to miss the mark of both the original Spanish and of Haviland’s interpretation. The same is true of an attempt to interpret it as a verbless sentence and be left again with “He is covered blood.”

The likely solution is none of the above. Most important to note is that an explicit **preposition is often not required** in many Mayan languages to arrive at what is translated as a prepositional phrase in English. Despite the absence of a preposition, the meaning of the whole clause remains the same as if it were actually present. The evidence indicates this is likely the case here. So *b'alon ch'ich'* is the equivalent of *b'alon ta ch'ich'*. Also, as is often the case, the Spanish compiler provides meanings that include first person and sometimes second person examples. So *b'al* in this case could be either an adjective “covered” as suggested by Haviland or an intransitive verb as it can be in modern Tzotzil (cf. Delgaty and Sánchez 1978:18) with the meaning “se enrolla” “be wrapped in.” *B'alon ch'ich'* could then be translated literally as, “I am covered/wrapped

[with/in] blood,” which is what “sangriento” or “bloody” actually implies. The 1st person singular absolutive (Set B) person marker is the correct analysis of the final *-on* attached to the verb. Laughlin allows *b'al* to be either a transitive verb (Figure 191a) or an adjectival predicate (Figure 191b), but he does so only for the clause *b'alon ta ach'el* and not for *b'alon ch'in* (Figure 191c) or *b'alon ch'ich'* (Figure 191c).

That this solution is indeed correct is bolstered by other entries. For example, in the entry for *at*, Laughlin (1988:138) analyzes several clauses which have similar meanings although some of them use the preposition and some do not. Both *katinej 'ach'el* and *katinej jb'a ta ch'ich'* are translated similarly as “I was muddied” and “I was bloodied.” Similarly he translates both *'atin ch'ich'* and *'atin ta ch'ich'* as “be stained with blood.” Relevant here is that what is literally “with/in mud/blood” remains as the most accurate translation whether or not the preposition *ta* is explicitly represented. These examples accurately reflect the original Spanish entries which show the same variation without a relevant difference in meaning. Some of the clauses use the preposition and some do not. For example, under the rubric “ensangrentarse” (“be bloodied, bloody oneself”), there are four clauses provided as Tzotzil equivalents, “*xe'atin ta ch'ich'*, *xebaley ta ch'ich'*, *xkatin ch'ich'*, *katinej jba ta ch'ich'*” (Laughlin 1988:883). In each case, the literal meaning is “. . . in/with blood.” The various entries for “enlodarse” (“be muddied”) and “*enlodado*” (“muddied”) show similar variation (Laughlin 1988:880-881). In another entry, the original dictionary indicates that one can use the same basic structures and just plug in the words *ach'el*, *ch'ich'*, and presumably *chin*, to get parallel meanings: “Vide enlodarse y mudando *achel* y lodo en *chuch* [*ch'ich'*] y sangre significa ensangrentarse” (Laughlin 1988: 883). This entry can be translated in this way: “See [the entry] ‘be muddied’ and by changing *ach'el* and ‘mud’ into *ch'ich'* and ‘blood’ it will mean “be bloodied.” This adds to the implication that the entries with and without *ta* are equivalent in meaning.

One of the results of this search for intransitive resultatives in the Santo Domingo Zinacantán dictionary is that all of the candidates in *-em* have proved to be other forms

instead, mostly stative participles. All but one of the candidates in *-om* have also proved to be mostly stative participles or agentives. However, one candidate, *ayom*, is an intransitive resultative form. This is made clear by its use in a sample sentence. What remains in regard to Colonial Tzotzil is to search elsewhere for possible early texts with evidence of intransitives in *-om* being used as resultatives. Although their shape would be identical to gerunds and participles derived from intransitive verbs, the context and their use as verbs with a stative/resultative connotation should make them quite recognizable. Unfortunately, I am currently not aware of any texts that might serve as the basis for such research. Still, the history of the gerunds and participles in *-om* that are also derived from intransitive verb stems in both the Tzeltalan and Ch'olan languages, provide evidence that, although identical in shape to other *-om* suffixes including the *-om* resultative, they are not really the same. Their function, usage, and changes over time betray a separate identity despite their outward similarity at different times and in different languages and dialects. The existence in modern Tzotzil of nouns and adjectives evidently derived from intransitive stems by an unproductive *-om* suffix while, at the same time, intransitive resultatives are all inflected by *-em* adds weight to the validity of the distinction between these two suffixes. The former is a derivational suffix and the latter an inflectional aspectual suffix.

Tzotzil has been the focus of this investigation because of the depth of the material available in the Santo Domingo Zinacantán Tzotzil dictionary (thanks to Laughlin 1988), the insights into grammatical function (thanks to Haviland 1980; 1988), the comparative linguistic analysis available from Tzeltal (thanks to Kaufman 1971; 1972 and Smith n.d.; 1999). Its historical-linguistic proximity to Ch'olan makes it one of the primary sources for analytical insights into the verbal morphology of the Classic-Period texts. This is especially true in the case of both the transitive and intransitive resultative forms. The Ch'olan languages have not been as useful in this regard primarily because they no longer employ either the transitive or intransitive resultatives as aspectual inflection as both Tzotzil and Tzeltal still do.

5.2 Intransitive Resultatives and Temporal Enclitics in Classic-Ch'olan

5.2.1 Verb Form *uhto'm* in Classic Ch'olan

The suffix *-o'm* occurs regularly in the texts of the Classic Period. We have already seen examples of it when discussing the formation of agentives as shown in Figure 186. However, there are many other occurrences that do not fit well within the agentive classification. One of the most common examples involves the verb root *ut*. It is a transitive root in many Mayan languages (Kaufman 2003:739). However, Kaufman and Norman (1984:135) reconstruct a passive **uht* for Proto-Ch'olan. Elsewhere, Kaufman (1989:Ch.3.A.3, p.39) classifies *uht* as a mediopassive. It should be noted, however, that it does not take the usual passive thematic suffix *-aj* in the Classic texts. Nor does it take the usual mediopassive marker *-Vy* either. Instead, it behaves in that regard more like a root intransitive and takes the usual root intransitive marker *-i* as can be seen in Figure 192.

Passives and mediopassives that behave more like root intransitives are not uncommon in both the Tzeltalan and Ch'olan languages. This particular root, *ut*, does not behave that way in Tzotzil or Tzeltal (cf. Kaufman 1972:120) although it does in the Ch'olan family. Other forms of *uht-* from the Classic Period texts will be examined later in

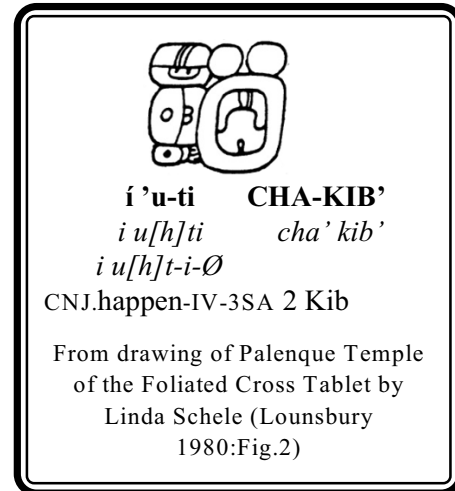


Figure 192. Classic Ch'olan quasi root-intransitive verb *uhti*

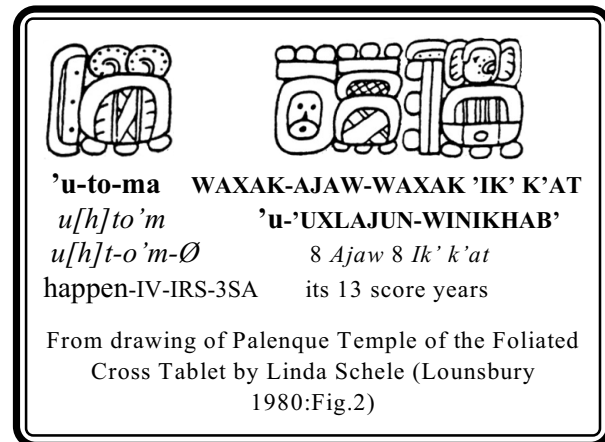


Figure 193. Verb stem *uht* with *-o'm* suffix

more detail. Important for now are its occurrences with an *-o'm* suffix such as that in Figure 193.

The verb form **'u-to-ma** *uhto'm* often appears in Classic texts in reports of dates or events which have not yet occurred at a specific point in the narrative time line. Linda Schele (1988:30) notes that David Stuart suggested to her in 1986 that it “had to represent a future tense of some kind since it always preceded the record of the *k'atun* in which a particular event occurred, but at the time of the narration, the event was not yet completed.” In a 1987 Cleveland State University workshop presented by Schele, Terrence Kaufman (1989:Ch.3.A.3, p.39) proposed that this form “In Classic Mayan texts (Copán and perhaps elsewhere) . . . seems to be the potential-future participle/ gerund of <ut> /uht/ vi: mediopassive ‘to become, happen’ < pM *ut T ‘to do’.” Schele (1988:30) also notes that at about the same time, Ben Leaf left her a note in which “he identified the same glyph as the future inflection of ut.”¹⁸¹

Although many, but not all, of the contexts in which *uhto'm* appears to refer to a time in the future, that alone is not sufficient reason to call its suffix *-o'm* a future form, whether as a participle or inflection. This would be similar to calling verbs inflected for the transitive resultative in the Classic inscriptions “secondary verbs,” as was done for a time, based solely upon their usage in a particular context which placed the nominal referent of a dependent pronoun outside of the sentence (cf. MacLeod 2004). At best such a description, without a thorough examination of the rest of the context, categorizes a particular type of discourse pattern, at worst it prevents us from correctly determining the grammatical form of various verbs used in such contexts. Although use in context is among the most important criteria for analyzing and classifying specific morphemes such as suffixes, it is also important to avoid assigning grammatical categories without an extensive review of the different discursive contexts in which they appear. Other morphemes that appear in and around those contexts may be the determining factors instead. The cautionary note from Hewson and Bubenik (1997b:353) that “function

¹⁸¹Versions of this information provided by Schele appear in the “Notebook (or Workbook) for the Maya Hieroglyphic Workshop at Texas” in subsequent years up through 2001.

[alone] is not enough to determine the status of linguistic elements,” is also applicable here.

5.2.2 Pair of Temporal Indicators in Ch’olan

In the data examined from Colonial Tzotzil, Tzeltal, and the Ch’olan languages, there has been no evidence found of a future tense or future-perfect participle in *-om*.¹⁸² Instead, the suffixes *-om* and *-em* insofar as they appear on intransitive stems are either suffixes which derive stative gerunds and participles or which inflect resultatives. In fact, intransitive resultatives in Tzotzil and Tzeltal, just as transitive resultatives, are not inflected for tense at all. Nor are they inflected for incomplete or complete aspect. Because they are unmarked for both tense and incomplete or complete aspect, they are open to use in various contexts whether past, present, or future. Since this is true, one would expect other factors in the relevant passages to provide the temporal indicators as needed.

With this in mind, we will examine first the different contexts in which *uhto’m* appears, paying special attention both to the temporal flow of the discourse and to any possible indicators of that flow other than the previously suggested *-o’m* suffix. Such temporal indicators had been noticed by epigraphers long before future inflection or a future-perfect participle in *-o’m* was suggested. While this will take on even greater importance later in the overall examination of tense and aspect in the Classic Ch’olan script, a general understanding of these indicators and how they are used is necessary for

¹⁸²It should be noted that, for example, Yucatek does have what Bolles (2001:2827) calls a “prophetic future” in *-om* which may be one of the languages that inspired the suggestion of a future participle: “*-om* . . . prophetic future intransitive verb suffix.” He goes on to note “the interchangeable use of the forms using the verbal suffixes *-om* and *-aan*. . . . [I]n the prophecies it is not very important whether the future or past tense of a verb is used since the past and the future are conceptually the same thing as far as these cyclical prophecies are concern[ed]. . . . *yukbanom*: temblara la tierra (pertenece a los futuros en *om*).” However, I do not think that we are dealing with this Colonial Yucatek prophetic future in the Classic Period texts because of the drastic differences between Yucatekan and Greater Tzeltalan verb morphology, the absence of this “prophetic future” in all the Greater Tzeltalan languages, and for other reasons which will be argued in what follows here.

the argument being made at this time regarding the *-o'm* forms in the Classic texts. For that reason, they must be described first.¹⁸³

Forward (“Future”):			
<u>Proto-Ch’olan</u>	<u>Proto-Mayan</u>	<u>Proto-Tzeltalan</u>	
* <i>chab’-ij</i>	* <i>ka’b’-eej</i>	* <i>cha’b’-ej</i>	[“two days from now
* <i>ux-ij</i>	* <i>oox-eej</i>	* <i>ox-ej</i>	[“three days from now”]
* <i>chun-ij</i>	* <i>kooñ-eej</i>	* <i>chon-ej</i>	[four days from now”]
Back (“Past”):			
* <i>äk’b’-i</i>	* <i>ahk’ab’-ey</i>		[“yesterday”]
* <i>chäb’-ij-i</i>	* <i>ka’b’-ej-eer</i>	* <i>cha(’)b’-j-ey</i>	[“two days ago”]
* <i>chun-ij-i</i>	* <i>kooñ-ej-eer</i>	* <i>chon-j-ey</i>	[“four days ago”]
* <i>on-i</i>	* <i>ooñ-eer</i>	cf. Tzo <i>wo’ne</i>	[“a long time ago”]
* <i>sahm-i</i>			[“earlier today”]
* <i>ux-ij-i</i>	* <i>oox-ej-eer</i>	* <i>ox-j-ey</i>	[“three days ago”]
(Adapted from Kaufman and Norman 1984:115,138,145)			

Figure 194. Reconstructions of future (non-past) and past temporal deictic enclitics

5.2.2.1 Reconstruction of a Pair of Temporal Indicators for Proto-Ch’olan

A set of enclitics documented in the Ch’olan languages (with related forms reconstructed for Proto-Ch’olan) share a number of characteristics with those about to be examined here. Kaufman and Norman (1984:145) reconstruct a derivational suffix “**-i* ‘in the past’” for which they list six examples. As summarized in Figure 194, they relate several of these to Proto-Tzeltalan and Proto-Mayan antecedents as well. Although the target suffix of their reconstruction is listed as **-i* for Proto-Ch’olan, they include several “in-the-past” compounds formed by adding the *-i* to another suffix *-ij* to form a compound. As also shown in Figure 194, Kaufman and Norman (1984:115,138) reconstruct the first part of the compound as a derivational suffix of the shape **-ij* in

¹⁸³Portions of what follows describing the temporal enclitics have been published elsewhere by me (Wald 2004b) in a somewhat different form and in a context not related to the *-o'm* suffix.

Proto-Ch'olan. It has the opposite meaning from the **-i* suffix, that is, “in the future” instead of “in the past.” More accurately and literally, it indicates “not in the past.”¹⁸⁴

Although Kaufman and Norman classify these as “derivational suffixes,” I interpret them instead as enclitics, at least in the Classic-Period texts.¹⁸⁵ The “in-the-future” or “forward” enclitic **-eej* is reconstructed by Kaufman and Norman with a long vowel in Proto-Mayan. However, when it serves as part of a lexical stem for the “in-the-past” or “back reference” enclitic **-eer*, its vowel becomes short instead resulting in **-ej-eer*. In the case of Proto-Tzeltalan which Kaufman has reconstructed without long vowels, **-ej* “in the future,” loses its vowel altogether when it combines to form a compound meaning “in the past,” **-j-ey*. This variation may have some bearing upon the enclitic forms found in Acalan Chontal and in the Classic-Period inscriptions. For Proto-Ch'olan, Kaufman and Norman have reconstructed two different forms as can be seen in Figure 194. It appears that they have opted for **ij-i* as the form of the enclitic appearing on numbers and *-i* for the form used on other adjectives or adverbs, although that distinction is not stated by them explicitly.

The merits of Kaufman and Norman’s particular reconstructions will not be questioned or addressed here. However, because the focus of the present study is not on recreating a proto-language but rather on actual texts written in specific languages, it is useful to note the type and extent of the variation that has been recorded by linguists within the Ch'olan language family and even within the same family member. Some of this variation can be seen in Figure 195.¹⁸⁶

¹⁸⁴It is important to note here that the terms “non-past” and “past” in reference to these enclitics is not meant to be interpreted as being indicative of “past-tense” or “non-past-tense.” Instead, these terms are simply being used as shorthand way to refer to adverbs which are amenable to various translations in context. The importance of this observation will become clearer as this discussion progresses.

¹⁸⁵They are enclitics because “Clitics are morphemes that cannot appear as independent words in discourse. Unlike affixes, clitics are not properly part of the inflectional paradigm of the word to which they attach. In many cases clitics can be attached to different types of words” (Kaufman and Norman 1984:94). The last point will be argued in more detail later (see Section 6.2.1 below).

¹⁸⁶Figure 195 is meant to be taken as a condensed selection of parôle illustrating some of the forms of this enclitic in the Ch'olan languages. In general, forms that match those predicted for Proto-Ch'olan have not been included in the Figure. Also, not all these forms and their sources have been examined in enough detail to state securely that each variation represents a true alloform or merely an alternate

(continued...)

Proto-Ch'olan	Translation	Language - Source	Ch'olan Variants
<i>*äk'b'-i</i>	"yesterday"	Ch'olti' [1695] (Morán 1935c:2)	<i>acbihi</i>
<i>*chäb'-ij-i</i>	"day before yesterday"	Ch'olti' [1695] (Morán 1935c:6) Ch'olti' [1695] (Morán 1935c:2) Tila Ch'ol [Sapper 1907]* Tumbala Ch'ol [Sapper 1907]* Ch'ol [Berendt ca. 1850]* Ch'orti' (Wisdom 1950) Chontal (Knowles 1988)	<i>chacbihi</i> <i>chahbi</i> <i>chubhi</i> <i>chubih</i> [<i>chäbij</i>] <i>chöji</i> "antier" <i>cha'ak'bi'</i> <i>chäbi</i>
<i>*ux-ij-i</i>	"three days ago"	Chontal (Knowles 1988) Ch'orti' (Wisdom 1950)	<i>?ushäbi</i> <i>uxi'</i>
<i>*chun-ij-i</i>	"four days ago"	Ch'orti' (Wisdom 1950) Ch'orti' (Pérez M. et al. (1996)	<i>cha'ani'</i> <i>chuni'</i>
<i>*on-i</i>	"long ago"	Tumbala Ch'ol (Feldman 1986) Tumbala Ch'ol [Rau ca. 1900]* Ch'ol (Aulie & Aulie 1978) Tila Ch'ol (Warkentin & Scott 1980) Ch'orti' (Wisdom 1950) Ch'orti' (Wisdom 1950) Acalan Chontal (Smailus 1975, dict.) Acalan Chontal (Smailus 1975, text)	<i>oniyi</i> <i>oniyix</i> "antes" ("earlier") <i>oniyi</i> <i>oniyix</i> <i>oni</i> "earlier", "previous" <i>oni'ix</i> "long ago" <i>oni</i> "many years ago" <i>onihi</i> "many years ago"
*Sources in brackets followed by an asterisk appear as edited in Josserand and Hopkins (1988c)			

Figure 195. Entries showing variation in attested forms of temporal deictic enclitic *-iji* ∞ *-i* (*ihi* ∞ *-i*) among and within Colonial and Modern Ch'olan languages

5.2.2.2 Attested Variation in "Past" Temporal Enclitic Forms in Ch'olan Languages

Kaufman and Norman have reconstructed the shorter form of the past enclitic in the words **äk'b'-i*, **on-i*, and **sahm-i*. I have not been able to find documentation for *sahmi* with a different form of the enclitic, but as shown in Figure 195, there is evidence of an alternate form for *äk'b'i* and several for *oni*. Also as shown in Figure 195, Morán (1935c:2, 6) writes this compound as *acbihi*, providing post-Conquest evidence for the use of the longer form of the enclitic with it. The root *on* appears in a variety of forms.

¹⁸⁶(...continued)
orthography. However, the recurring patterns of similar forms do provide support for the existence of specific basic allomorphs.

Important for present purposes is the occurrence of *onihi* in Acalan Chontal, again providing evidence for the longer allophone of the past deictic enclitic in a Ch'olan language. Another variant *oniyi* is documented for Ch'ol, but even more important for comparison with forms found in Acalan Chontal are the similar variants *oniyix* in Ch'ol and *oni'ix* in Ch'orti',

There is, then, documentation from the sources noted in Figure 195 for a longer form of the past deictic enclitic in Ch'olan, usually *-iji*, even among compounds reconstructed by Kaufman and Norman with the shorter form in *-i*. Conversely, there is also ample documentation for the shorter form on those reconstructed by Kaufman and Norman with the longer form. Morán (1935c:2, 6) provides the matching form *chacbihi* for the **chäb'-ij-i* Proto-Ch'olan reconstruction, but he also provides the alternate form *chahbi*.¹⁸⁷ This is evidence from within the same language of both the longer and the shorter form combined in the same numeral-enclitic compound. Moving to another language but still within the same Ch'olan family, Ch'orti' sources have *uxi'* for what has been reconstructed as **ux-ij-i* “three days ago” and *cha'ani'* and *chuni'* for **chun-ij-i* “four days ago.” Despite the smaller likelihood that these higher-number forms would be included in dictionaries, these shorter forms are nevertheless attested within the Ch'olan language family. Although some questions remain, I believe this is enough evidence to indicate **there is no strict breakdown** between the groups of stems that take the longer and those which take the shorter versions of this enclitic.

Although Lois Feldman (1986:44-45) is addressing forms of the temporal deictic enclitic specifically in Tumbalá Ch'ol, both her data and her approach as offered in Figure 196 may be helpful here. She follows Kaufman and Norman in analyzing the basic form of the past temporal enclitic as *-i* but lists two other forms as alloforms. One of them, *-ij-i* is identical to the alternate form that is reconstructed by Kaufman and Norman in Figure 194. The form *oniyi* may be limited to Ch'ol but is probably a variant of *onihi*

¹⁸⁷It is possible that Morán's compound is made up of *cha'* “two,” *ak'ab'* “night,” and *-i* “in the past.” This however does not negate the direct comparison here especially with Ch'orti' which also incorporates *ak'b'i* but attests instead the short form of the enclitic.

- *i* ~ *ij-i* ~ *iy-i*
i with *ak'b'** 'night'
ij-i with *chäb'* 'two' (with other numerals also)
iy-i with *on* 'much'
 - Derives noun stems functioning as adverbs of time from roots of various classes
 - Examples:

<i>ak'b'</i> * noun	'night'	⇒ <i>ak'b'-i</i>	'yesterday'
<i>chäb'</i> number	'two'	⇒ <i>chäb'-ij-i</i>	'day before yesterday'
<i>on</i> [aj] pos	'much'	⇒ <i>on-iyi-i</i>	'a long time ago'
- (Adapted from Feldman 1986:44-45)

Figure 196. Alloforms of past temporal deictic enclitic in Tumbalá Ch'ol

which is attested in Acalan Chontal (see Figure 195). This analysis of *-i* and *-iji* as alloforms of the same underlying morpheme fits in well with what Kaufman and Norman have reconstructed for Proto-Ch'olan, especially in light of the data gathered above in Figure 195.

5.2.2.3 “Future” or “Non-Past” Temporal Enclitic

In spite of the utility and accuracy of viewing the longer form of the past-temporal enclitic **-iji* in Proto-Ch'olan (**-ejeer* in Proto-Mayan), as an allophone of **-i* (or **-eer*), it is also clear that it is a bipartite morpheme, made up of **-ij* and **-i* (**-eej* and **-eer*) as indicated in Figure 194. When attached to numbers in the Colonial and Modern languages, *-ij* (<**eej*) refers to time in the future. So **chab'ij* means “the day after tomorrow.” An alternate, and more literal, way of viewing this enclitic in such contexts is as a temporal directional indicator meaning “forward,” or “ahead.” So **chab'ij* means “two forward” or “two ahead” and it is understood to refer to days as long as no other time frame is explicitly stated. Although its use with numbers smaller than twenty is not as common in the Classic texts, there is an example of exactly the compound reconstructed by Kaufman and Norman. It occurs on a small box from the site of Tortuguero as shown in Figure 197.

CHA'-b'i-ji *chab'ij*
occurs in this inscription
written just as attested in
modern Ch'ol and
Ch'orti'.¹⁸⁸ It also has the
meaning “two [days] in the
future” already in the
Classic-Period inscriptions
as shown in Figure 197. The
passage could be transcribed
as *wak etz'nab' b'uluch*

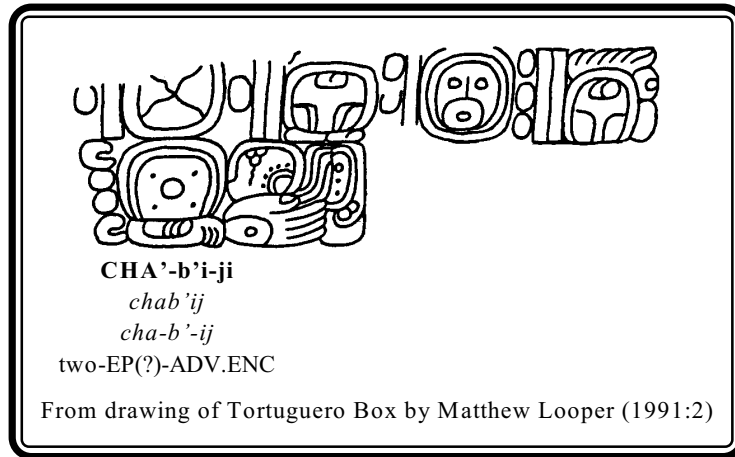


Figure 197. Temporal adverbial enclitic *-ij* indicating time in future

kase'w chab'ij k'ahlaj tuun waxak ajaw uxlajun kase'w. There are several ways it could be translated into English. One of them might be: “[On] six *etz'nab'* eleven *kase'w* (*Sek*) [it was] two days in the future [that] the stone would be tied [on] eight *ajaw* thirteen *kase'w*.” Another might be “[On] six *etz'nab'* eleven *kase'w*, [it was] two days before the stone was tied [on] eight *ajaw* thirteen *kase'w*.” Still other variations are possible. The main point here is how *chab'ij* serves the purpose of relating the two dates to each other and to the event with occurs on the later date, the tying of the stone.

The first date in the Figure 197 passage is the day on which the Tortuguero ruler *B'ahlam Ajaw* died. This was just two days before the period-ending date of 8 *Ajaw* 13 *Kase'w* (*Sek*), 9.12.7.0.0 in the Long Count, which is normally a time when a stela or other stone monument is erected. Many events that are not timed for a particular date are tied into these period-ending events and dates. What is important for our purposes is that the enclitic *-ij* is used to point forward to the event and the date that lay two days in the future from the previous Calendar Round date 6 *Etz'nab'* 11 *Kase'w*. In fact, the sentence is stating the distance between the two dates, the period-ending date and the date on which the ruler died, without at this point explicitly stating the significance of the

¹⁸⁸It should also be noted that there is no indication here from the vowel of the final sign **b'i** that the vowel /i/ in the suffix should be long although it would be in Proto-Mayan.

latter. Yet its import is probably assumed to be known by the intended audience, especially since it is a small, more private, object. Even failing that, the significance of the date can be deduced from the information that follows later, not reproduced here, which reports his death or burial and links it with a distance number count. It should also be noted that the form of the verb *k'ahlaj* “wrapped, tied” does not change here simply because the forward or future temporal enclitic is used. It remains the same in this Classic Ch'olan text although English and Spanish might require a different tense depending upon how one wished to translate this sentence. The importance of this phenomenon will become clearer as this study progresses.

5.2.2.4 Temporal Enclitics on Words Other than Numbers

The use of the temporal enclitics on words other than numbers has already been shown in Figure 195 above by the inclusion of *oni/onihi*, *ak'b'i/ak'b'ih*, and other such pairs. There are some other important examples as well. The Ch'orti' word *inyahr* means “one time, once, as soon as (Wisdom 1950:697). The word for “next time” is *inyahrih* which is the same stem with the addition of the “forward” enclitic. The word for “last time” is *inyahri'* which is the same stem with the “backward” temporal enclitic attached.

Not yet mentioned but of the utmost importance in the Classic inscriptions is the occurrence of these enclitics on words for time periods. They are in evidence in the Colonial and Modern Tzeltalan and Ch'olan languages, some examples of which can be seen in Figure 198. The occurrence of either enclitic on time period nouns for “day” is rare in the Classic Period texts. However, *ux k'inih* for “three days hence” and *ux k'ini'* for “three days ago” is attested for Ch'orti' (Wisdom 1950:749). Unfortunately, with the European calendar replacing the 365-day *haab'* divided into 18 *winik* or months of 20 days and a five-day *Wayeb'* (*Wayhaab'*) period at the end, the use of the terms *winik* and *winal* for month periods was eventually discontinued. The terms themselves designated the number 20 and so were no longer appropriate considering the different lengths of the European months. It is significant, however, that even the adopted Spanish word was

then used with the same enclitic, for example, in Ch’orti’, where *cha’ mesi’* has the meaning “two months ago” (Wisdom 1950:697). Since the *haab’* had as many days as a normal Spanish year, the use of a temporal enclitic on the word *haab’* is regularly attested. Figure 198 includes some examples from both the Tzeltalan and Ch’olan languages. Ch’orti’ closely follows what one might consider the most predictable pattern for the *haab’*. For “two years from now” Ch’orti’ has *cha’ habih* for “two years hence” and *cha’ habi’* means “two years ago” (Wisdom 1950:697).

	Ch’orti’	(Wisdom 1950)
<i>habih</i>	<i>jabij</i>	‘next year’
<i>aambi’</i>	[<i>in-xap’-i’</i>]	‘last year, a year ago’
<i>cha’ habih</i>		‘two years hence’
<i>cha’ habi’</i>		‘two years ago’
<i>ux habi’</i>		‘three years ago’
[<i>uxih, ux k’inih</i>]		‘three days hence’]
[<i>uxi’, ux k’ini’</i>]		‘three days ago’]
	Chontal	(Knowles 1984)
<i>häb-i</i>	nc	number of years in the past
<i>hap’</i>	nc	number of years in the future
	Chontal	(Keller and Luciano G. 1997)
<i>unjäbi</i>		año pasado, hace un año
<i>unjab, unjabto</i>		año proximo
	Colonial Tzotzil	(Laughlin 1988)
<i>’ab</i>		future year
<i>jun ’ab</i>		a year from now
<i>cha’-’ab</i>		two years from now
<i>’abi</i>		past year
<i>jun’abi</i>		last year (or) a year ago
<i>cha’-’abi</i>		two years ago
	Bachajon Tzeltal	(Slocum et al. 1999)
<i>jun hab to</i>		el año entrante
<i>jun habey</i>		el año pasado
	Proto-Tzeltal-Tzotzil	(Kaufman 1972)
<i>*jun-ab’</i>		el año entrante (“the coming year”)

Figure 198. Forms on time-period nouns indicating time in past and future in some Colonial and Modern Greater-Tzeltalan languages

Despite the expected pattern presented by Ch'orti', there are indications from some other languages of a pattern that is also found often in the Classic Period texts. Both Chontal and Colonial Tzotzil provide evidence of indicating years in the past with the shorter form of the past enclitic and years in the future with no enclitic attached at all. As can be seen in Figure 198, both Knowles (1984:420-421) and Keller and Luciano G. (1997:314) attest *hăb'i* as referring to “number of years in the past” and *hab' /hap'* to “number of years in the future.” The Spanish compiler of the Santo Domingo Zinacantán Tzotzil dictionary also found *'abi* referring to “past year” but attests *'ab* without the expected enclitic for time in the future (Laughlin 1988:128).¹⁸⁹ Tzeltal has *jun habey* for “last year” but *jun hab to* for “until next year” (cf Smith 1999:3.5.5.2).¹⁹⁰ This interpretation is reinforced by Kaufman's (1972) Proto-Tzeltal-Tzotzil reconstruction of **jun-ab'* for “el año entrante” (“the coming year”) and **jun-ab'ey* for “año pasado, hace un año” (“last year, “one year ago”). This evidence from the Colonial and Modern Greater Tzeltalan languages will prove to be indicative of patterns in the Classic Ch'olan texts as well.

5.2.3 The Temporal Enclitics in Classic Ch'olan

5.2.3.1 Non-past Temporal Enclitic in Classic Ch'olan

Similar evidence that either the absence of an enclitic or reflexes of the enclitic *-ij* can signal a forward count or reference is also present in the Classic Period texts. Figure 199 shows a passage in which the enclitic *-ij* is attached to *winik* in a distance number. In this case, the forward-referenced temporal enclitic can be translated as “before” or “until”

¹⁸⁹It should be noted that what one really expects here for the past/backward temporal enclitic is *-jeŷ* or *-ey*. For modern Tzotzil, Laughlin explains this as being *habil* with the final /l/ dropped. I believe instead that the *-i* is borrowed from a Ch'olan language, most likely Ch'ol, whose speakers border upon and are to a degree interspersed with Tzotzil speakers. Whether or not that is true, it still appears that of the two compounds, it is the forward/future enclitic that is likely to be unmarked if indeed either is.

¹⁹⁰Note that although Slocum et al. (1999:40) list *jun hab to* as “hasta el año entrante” (“until the coming year”), it is not the word *to* that produces the “future” or “forward” effect. As Smith (1999:3.5.5.2) also notes, the phrase *jun hab' to* means “until the coming year.” Here, *to* which has a range of meanings including “still, yet” and Spanish “todavía” provides the “until” part of the translation. “Next year” comes from *jun hab'*.

in English. This passage is being presented here only to provide a general idea of how the non-past temporal enclitic functions. This very same passage will be reviewed later in Section 5.2.4.3.2 and explained in greater detail.

What is important to note now is that the scribe is explaining how long before a specific date, here 13 *Ajaw* 10 *K'ank'in*, a previously reported event occurred. That specific information, 12 days and 8 twenty-day months, and 1 360-day year is provided in the first 1 ½ glyph blocks. The event is *jub'uy ta okte'lel*, “he was installed as pillar(?) (next in line to the throne?). It was an important event in the life of a member of the ruling family, in this case, the one who became the next ruler at Palenque. As is very often the case throughout the Classic Maya

area, such important events are carefully placed into the overall calendrical time frame by relating them to the next important period ending. Here that period ending date is 9.10.10.00.00 (A.D. 642) which is a 10 year set of 360-day years. The passage can be **paraphrased** as: “It was just 12 days, 8 months (*winik*), and 1 year (*haab'*) before the end of the 10-year period that the future ruler *Kan B'ahlam* was installed into this important office, his designation as *okte'lel*.” From a discourse standpoint, which for the present purpose is the most important, only an enclitic that points forward to the period-ending date could correctly indicate the direction of the temporal movement.

5.2.3.2 Behavior of These Enclitics on Distance Numbers in Classic Ch'olan

There is another important detail that is also illustrated in the Temple of the Sun Tablet passage in Figure 199. It is not necessary for each of the time-period nouns in a

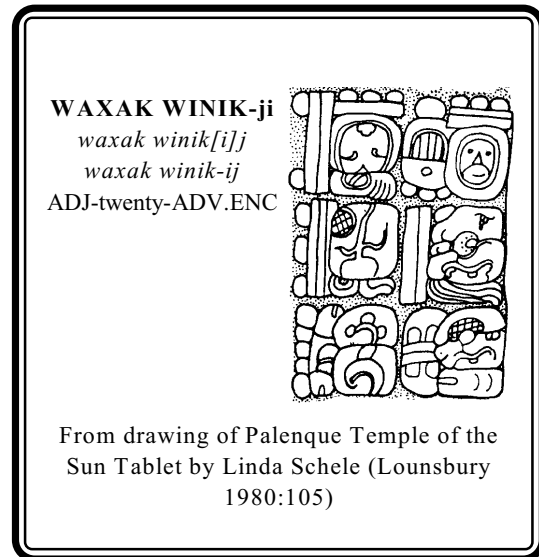


Figure 199. Non-past or in-the-future temporal deictic enclitic in Classic Ch'olan

distance number to have a temporal deictic enclitic attached. While it is usual for them to be lacking on the “day” position even when the time-period glyph is actually written, they can also be absent from any of the other signs. When only one period noun has an enclitic, it is usually the **WINIK** glyph to which it is attached. However, there are a number of exceptions to this, for example, the passage in Figure 200 only carries an enclitic on the **HAB'** glyph for *haab'iiy*.

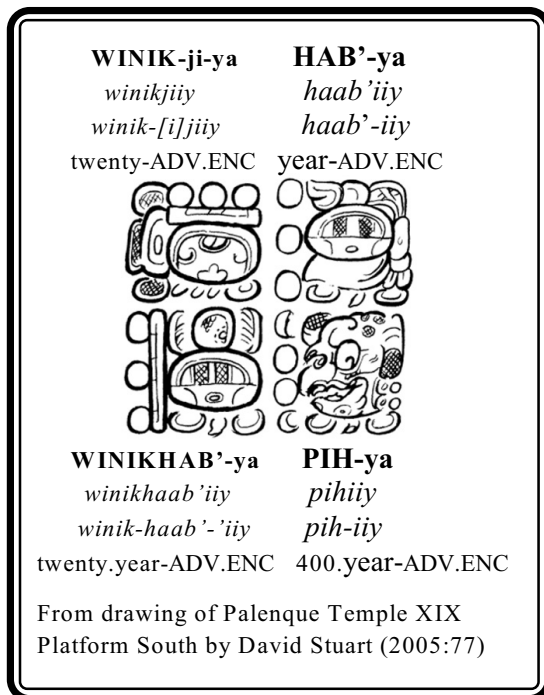


Figure 201. Usual spellings of past temporal deictic enclitic on time-period nouns

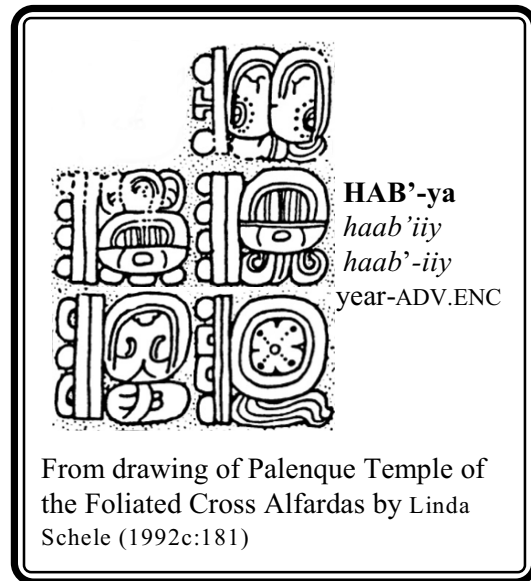


Figure 200. Past temporal enclitic appearing on only one time-period noun in set: *haab'*

It is also important to recall, as already noted, that in some of the Colonial and Modern Greater Tzeltalan languages, the non-past or future temporal enclitic *-ij* or *-ej* serves as a base to which the past temporal enclitic *-i(y)* or *-e(y)* can be attached to form a compound enclitic that still serves as a past temporal enclitic meaning “ago” or “after.” But *-i(y)/-e(y)* can also be used alone on the nominal stem and result in the same meaning. More important for the discussion of the non-past

enclitic is that, as attested in Figure 198 above for some of the Greater Tzeltalan

languages, the time period-nouns can have a forward or future connotation even when the *-ej/-ij* enclitic itself is not explicitly present.

For distance numbers in the Classic Period, the patterns for the forward and backward referencing enclitics are essentially the same although somewhat more complex. This is to be expected since including multiple time-period nouns opens up the possibility of more variation. Let us start first with the temporal enclitic used in back referenced or count-away-from contexts. Just as do the enclitics attached to numbers in the Colonial and Modern languages, those in Classic Ch'olan can also take two basic forms. Glyphically, it can consist of the syllables **-ji-ya** or **-ya**. Transcribed, these are the equivalent of *-ijiiy* and *-iiy* using the Lacadena-Wichmann method of transcription.¹⁹¹ There are no noticeable semantic differences between the two forms. There are observable frequency patterns, however. The **ji-ya** glyphic version occurs most often on the **WINIK** glyph and the **-ya** version most often on the **HAB'** and higher time-period glyphs such as the **WINIKHAB'** and **PIH** or **PIK**.¹⁹² An incidence of this pattern can be seen in the distance-number example shown in Figure 201.

Although this distance number shows typical suffixing patterns, there are many variations that must be taken into account in order to arrive at an accurate assessment of just what elements are critical for correct interpretation. The example just seen in Figure 201 has the past enclitic attached to all the time periods except for “day” which is not represented there by a time-period noun. But also common in longer counts are distance numbers such as those in Figure 202 which has **ji-ya** on the **WINIK** glyph but none on the **HAB'** or **WINIKHAB'** glyphs.

¹⁹¹For those who do not ascribe to this method and its consequences, the equivalent would be *-ijiy* and *-iy*.

¹⁹²The word for the 400-year period is written as **pi-hi** *pih* at Palenque and as **pi-ki** *pik* at Caracol. Both refer to a nominal 8000-day but actual 7200-day period in the calendar. Mark Zender (pers. com.) has provided convincing evidence that the 20-year period was indeed called a *winikhaab'* and not a *k'atun* during the Classic Period. There are a few examples of the glyph for this time period preceded by **wi**, for example in Figure 204, and others followed by or incorporating a **bi** as a phonetic complement, for example in Figure 203.

Still, one should not conclude that if the enclitic appears on only one time-period noun it must be on the **WINIK** glyph. In fact, we have already seen in Figure 200 a distance number with a back-reference enclitic **-ya**, **-iiy**, on only the **HAB'** sign. Nevertheless, the effect is the same. The count is away from a previous event or date. It seems then that the combination of a distance number and the past temporal enclitic produces a “count-away-from” effect whether the past enclitic appears on one or all of the time-period nouns. This effect is the same even if none of the others have an enclitic. The reference is back to an earlier event, usually one that has already been reported.

This discursive situation, in which the presence of the past temporal enclitic is on only one time-period noun in distance numbers indicates a count away from a previous event, does not hold only when the other time-periods lack an enclitic. The example in Figure 203 shows that

even if one of the time-period nouns has the non-past enclitic attached but the past enclitic appears on another, the distance number still indicates time-away-from or time-after an event in the past. This suggests a basic rule concerning distance number sequences in the Classic Period. If any of the time-period nouns has the past enclitic

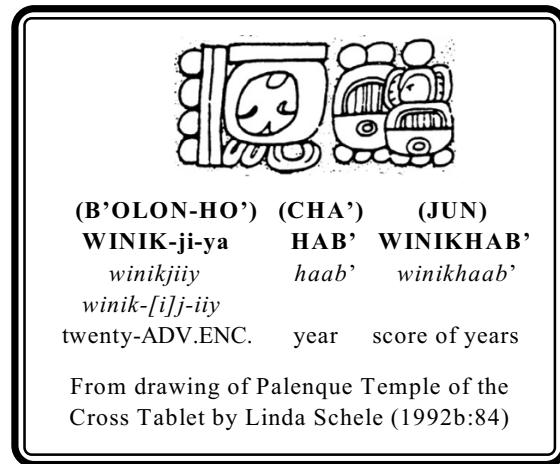


Figure 202. Past temporal enclitic attached only to *winik* time-period noun

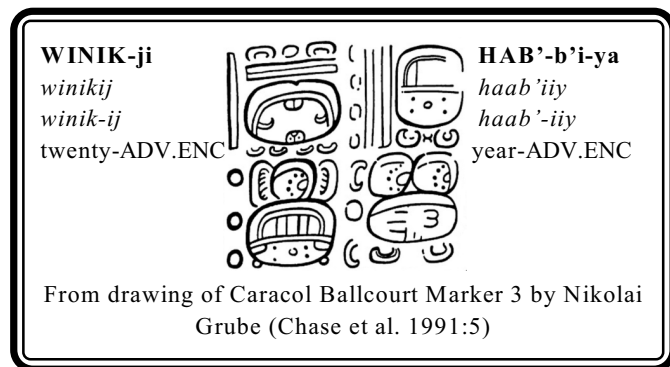


Figure 203. Non-past enclitic attached to one time-period noun but past enclitic to another

attached in distance-number contexts, the count is away from an earlier event or date instead of toward a later event or date.

5.2.3.3 Temporal Enclitics and Some Unconventional Distance Numbers in Classic Ch'olan

Up to now, this discussion concerning the temporal deictic enclitics in the Classic Period texts has concentrated on distance numbers that begin with the shorter time periods and proceed to the longer ones. But there are some distance numbers that proceed differently, listing first the longer time periods and their coefficients and

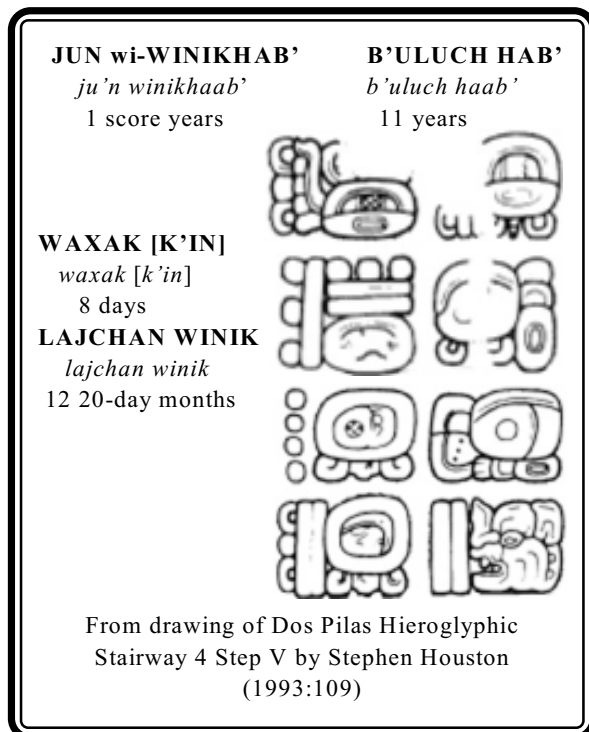


Figure 204. Distance number in reverse order except for *k'in* and *winik* information within one block

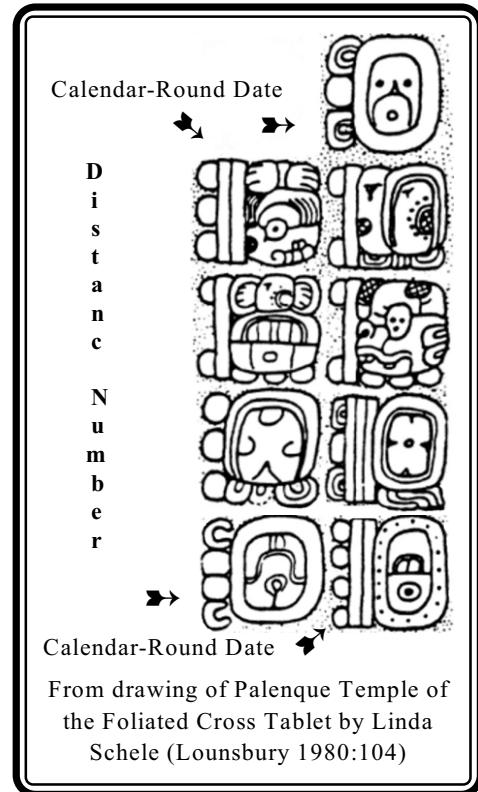


Figure 205. Distance number in reverse order

progressing toward the shorter ones. To avoid confusion and to make reference to it easier, this longer-to-shorter distance-number order will be referred to here as “reverse order.” Two examples are shown in Figures 205 and 204.

The first one, from the Palenque Temple of the Foliated Cross Tablet, is a count away from a previous event. Besides the context, this is indicated by the presence of the "time-after" enclitic *-ijiiy* attached to *winik* (**WINIK-ji-ya**). Of course, this was not the usual way to write a distance number, but it is one of several examples in which the order of the time periods is reversed. A further indication of this, besides its infrequent occurrence, can be seen in the example from Dos Pilas in Figure 204. The time-periods are listed in order from larger to smaller including the day/month counts as a group. However, the "day" and "month" counts themselves are not in reverse order. Instead, they appear with the co-efficient for the day preceding that of the *winik* as is usual in distance numbers. One would have to read them out of the normal left-to-right and top-to-bottom order for the reversed pattern to obtain with them.

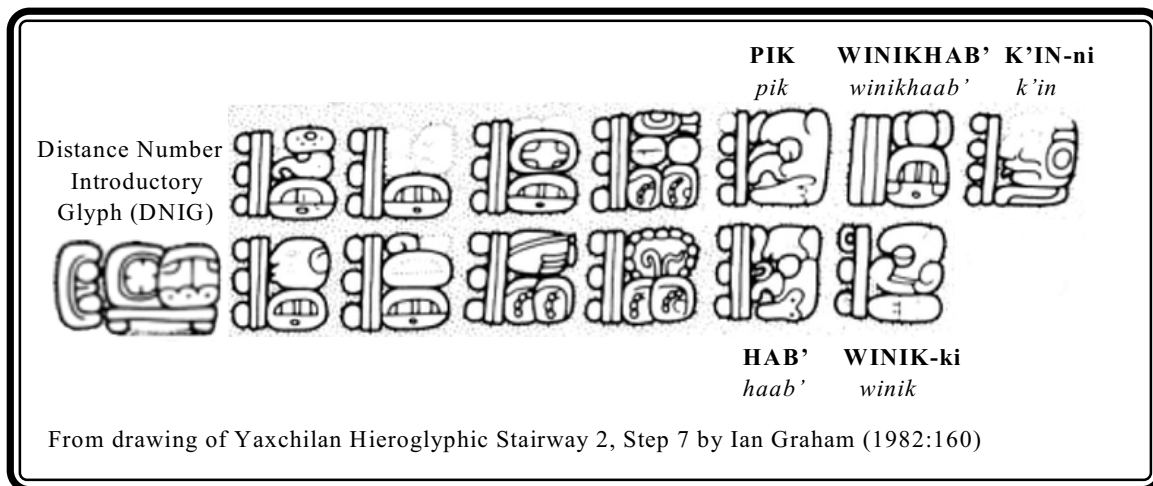


Figure 206. Long distance number with introductory glyph but in reverse order

Another example of a distance number in reverse order can be seen in Figure 206 on an inscription from Yaxchilan. It has at times been interpreted as a long count (cf. Schele 1991b:137-8), but the presence of a distance number introductory glyph (abbreviated DNIG) clearly indicates otherwise. Although the other two examples of reverse-order distance-numbers in Figures 205 and 204 include some of the expected markings on the period nouns, this one lacks those markings but includes an

unmistakable DNIG, making its identification quite certain. All of these examples and others not included here make it clear that distance numbers can proceed from larger to smaller time periods, their usual order notwithstanding. What is different about this distance number besides its extreme length and the unusual DNIG, is its forward counting direction up to the “stone-in-hand” event dated 3 Muluk 17 Mak (not shown here) which Schele (1991b:138) suggested may be the dedication of this stairway. Because the count is forward toward instead of away from a date, there are no past or “time-after” enclitics attached to any of the time-period nouns. In light of this example and its similarity to the so-called “long count” dates that begin many inscriptions, the question arises as to just what the difference is between a long count and a distance number.

There are a few essential criteria that unmistakably distinguish distance numbers from long counts in the Classic Period inscriptions, but they do not include the order in which the time period nouns can occur in distance numbers. Although almost all Long Counts are headed by introductory series initial glyphs (abbreviated ISIG), many distance numbers are not preceded by DNIG’s. Although almost all Long Counts are given in order from largest period nouns to smallest and most distance numbers are presented in order from smallest to largest time period nouns, we have just seen that some distance numbers are not.

Another difference between distance numbers and long counts is that, for distance numbers, both the date used as the point of reference or departure and the date used as the point of arrival or destination can and do vary. Among Long Counts, usually only the point of arrival or destination varies while the point of departure almost always remains the same at [13].0.0.0.0.0. 4 *Ajaw* 8 *Ohl* (“*Kumk’u*”). However, when referring to a time before 13.0.0.0.0.0, that usual starting point also changes.

A more critical difference between the two types of counts in the Classic Period texts, is that the Long Counts always proceed toward a later date in time which is the focus of that count. Since the count is toward that date, the time-period nouns in the Long Count do not have the past or back-reference enclitic attached. Most often, they do

not include either the past or non-past enclitic. However, the non-past (neutral or future) temporal deictic enclitic *-ij* occurs at times, albeit seldom, in Long Counts, usually on the **WINIK** (or **WINAL**) glyph as shown in Figure 207.

Here on Nimli Punit Stela 21 in a Long Count, the **-ji** on the **WINIK** glyph and the lack of temporal indicators on the other glyphs indicate that the time-count is forward to an event which is the first one reported after the *haab*' calendar day name (not shown here).¹⁹³ The Long Count can therefore almost always be viewed as a distance number that counts forward toward the date of the first reported non-calendrical event. That is why the time periods involved either take the non-past enclitic or no enclitic at all. It functions just as does

any distance number that counts forward toward the next date except that the point of departure is assumed and remains the same. Only when the date toward which it counts occurs before the current round of *pik* (“*b’ak’tun*”) cycles does that point of departure change. This occurs when the events recorded take place in the very-distant past, in so-called “mythological times.”

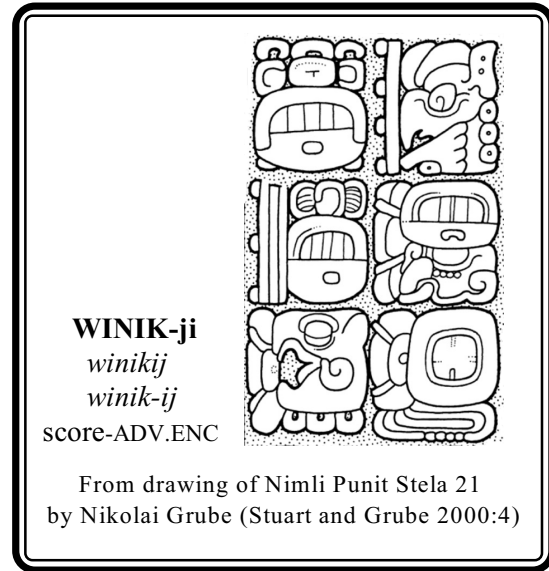


Figure 207. Presence of non-past temporal enclitic in Long Count

5.2.3.4 Evaluation of Opposing Interpretation of Non-past Enclitic

It has recently been suggested again by Robertson et al. (2004:264,288) that the *-ij* enclitic is a word for “day.” However, no linguistic data was offered as evidence other

¹⁹³My statement elsewhere (Wald 2004b:237) that *-ij* in the Long Count context does not indicate a forward count was too restrictive. In general, the enclitic *-ij* may indicate either a neutral or a future progression. In distance numbers, both *-ij* or lack of an enclitic indicates a forward count toward the date of the next event. Thus the similarity of Long Counts to distance numbers includes the use of the enclitic *-ij* to indicate a forward-toward count.

than the existence of numbers with *-ij* (**-ej* or **-eej*) attached to them with the meaning “days in the future.” On that basis Robertson et al. (2004:264) reconstruct “Common Mayan” **eej* which in combination with **eey* becomes **-ej-eey*. In more abstract terms, they identify **eej* as meaning “TIME UNIT” as in “*NUMERAL+TIME.UNIT+(*eey*).” They then continue:

The system is one of past/nonpast: **ox-ej-eer*, three-days-past, ‘three days ago’, **ox-(h)a’ab’-eer*, three-year- past, ‘three years ago’, versus *ox-eej*, three-day, ‘three days from now’, *ox-(h)a’ab’*, ‘three years from now, in three years’.

There are several serious problems that arise from this analysis. One problem with their argument has to do with their grammatical classification of this compound. They begin the discussion of **-eej*, listing it under the heading “TENSE ADVERBIAL” seemingly classifying it as an adverbial marker of time. They also provide examples of how it behaves appended only to a number without any other time unit. Surprisingly, they then state that it fills the slot of TIME.UNIT which, they contend, gives it a nominal meaning “day.” What is more, they do not justify referring to it as if it were a time-unit noun meaning “day” based upon any other contexts at all throughout the history of any Mayan language. Instead, they appear to justify classifying it as a noun only from its appearance in this context as what they call “adverbial tense.” They also contend that the word *haab’* “year” can substitute for **-eej* “day” although it is an independent lexeme instead of an enclitic and is extensively attested as such.

In order to avoid the problem created by allowing **-eej*, an enclitic, and **haab’*, an independent word, to function supposedly in the very same way, they offer this warning: “It is important to observe that the form **-eej* is a suppletive (irregular) form of ‘day’, since other adverbs of time, such as **ha’ab’*, ‘year’, are substitutable” (Robertson et al. 2004:264). Note their insistence here that both **-eej* and **haab’* are **adverbs** of time! This contradicts what they had just written at the beginning of the same paragraph

analyzing **-eej* as a **noun** meaning “day” and being the equivalent of “TIME UNIT,” clearly designating it as a noun and not as an adverb. I submit that a lexeme, whether independent or not, cannot at the very same time in the very same occurrence serve both as a noun and an adverb. At the very least, I find no evidence within the Mayan languages that would support this looseness in the application of these two grammatical categories. On the contrary, an analysis that classifies **-eej* as an adverb which in combination with numbers defaults to a reference to days removes all ambiguity. Explicit “time-period” nouns can then be inserted in cases where the reference is instead to other time periods. In other words, when unmarked, the reference is to days.

The first important point to make here is that *haab’* **does not substitute** for **eej* in “Common Mayan” nor for *-ij* in Classic Ch’olan. Instead, **eej* and *-ij* are **adverbial** enclitics which can be used on time-period **nouns** including *haab’* to indicate non-past time or temporal reference. As has already been suggested and will be demonstrated in more detail in the next section, in the context of distance numbers, either the exclusive presence of the *-ij* enclitic on a time-period noun or the lack of any enclitic on the time-period nouns indicates a count toward the next event. Thus *haab’* does not substitute for the enclitic at all, but instead can either have that enclitic attached or appear without any enclitic to indicate a count forward toward an event or date, with the proviso that none of the other time-period nouns has the past enclitic attached. .

Many languages have analogous usages of time-period nouns in contexts which default to a specific time-period if none is explicitly mentioned. For example, in English, the question as to one’s age, “How old is she/he,” is usually answered without a time-period noun, “She/He is three.” But if instead one intends a different time period, it must be explicitly stated, for example, “She/He is 18 months old” or “She/He is 5 days (or weeks) old.” It is this characteristic of time-period references which drives this usage of the temporal enclitics in the Ch’olan languages. The default to “day” if no time-period noun is present is also reflected in distance numbers in general in the Classic-Period texts

in which the author can either use a word for “day” such as *e’w* (or *eew*) or omit it without an obvious change in meaning.

Another argument against Robertson et al.’s interpretation of **eej* (*-ij*) comes from its attachment to lexemes with which the meaning “day” is hardly compatible. It has already been noted that *haab’ij* is an argument for *-ij* not being the equivalent of “day” as are its presence on other compounds such as *onihi*, *ak’b’ihi*, and *inyahrih* in the Ch’olan languages. In fact, interpreting the *-ih* of *inyahrih* in Ch’orti’ as “day” would change the meaning of that word altogether. Neither would one be able to easily explain the alternative of attaching *-ij* to *k’in* (“day”) to mean “days in the future” if *-ij* itself were a lexeme meaning “day.” Yet that option is precisely one that is noted by Wisdom (1950:749): *uxih*, *ux k’inih* “three days hence.”

Fox and Justeson (1984a:Fnt.37) noted that no one had “commented upon or generally accepted” Stoll’s (1888:55) argument that “the ‘forward’ suffix of Pocomchi was actually derived historically from the word for ‘day, sun’ (Pocomchi *q’i:j*). . . .” Doing so would make this etymology for the non-past or future deictic enclitic even more questionable because the equivalent word in the Ch’olan and Yucatekan languages is *k’in* with the final /n/ preserved from Proto-Mayan /ŋ/. Since it was the Eastern Highland languages that underwent the change from /ŋ/ to /j/, the Western Maya languages would have had to borrow this **eej*/**-ijj* back again with essentially the same meaning while preserving *k’in* in that meaning as well. That whole scenario seems highly unlikely. But if the **-eej* of the enclitic simply means “day” or even “time-unit,” and is not related to any other word for “day,” then there is no independent evidence for its meaning as “day.”

The **-eej*/**-ijj* enclitic, considered on its own, is indeed not a noun, but rather an adverb. When it occurs without **-eer/-iiy*, it has an adverbial meaning of “now, in the present,” or “hence, in the future” depending upon the context. It is also noteworthy that it is Ch’olan that has changed the form from Proto-Mayan **-ej-eer* (cf. Yucatekan **-ej-eeey*) and Tzeltalan **-ej-ey* to **ij-iiy*. This makes any proposed relationship of the non-past deictic enclitic *-ij* to Eastern Mayan *q’ij* extremely unlikely. But without a word

such as *q'ij* to lean on for the meaning “day,” such a proposal for the future deictic enclitic remains purely speculative. In light of the counter-evidence already presented, this would rule out Robertson et al.’s proposal.

Finally, the evidence from Chontal and Ch’ol indicates that the “day-before-yesterday” and “day-after-tomorrow” compounds remain viable even after the diachronically reconstructible *-ij* enclitic is no longer explicitly present. Both Feldman (1986:44) and Aulie and Aulie (1998:29) give the Tumbalá Ch’ol word for “day after tomorrow” as *chab’i*. The future deictic enclitic has here lost its final /j/ but the host word itself has remained unchanged. In the “day-before-yesterday” compound, the attachment has had a phonological effect upon the word, one based upon stress. Since the final syllable is stressed in almost all Mayan words, the root vowel of the word has become shortened to *ä* as in *chäb’ihi*. Chontal has taken this process one step further. The “day after tomorrow” in Chontal is the same as in Ch’ol, that is, *chab’i* (cf. Knowles 1988:408). However, Chontal also employs the shorter form of the past deictic enclitic, *-i* instead of *-ihi*. But prior to shortening the longer enclitic form, it had already shortened the root vowel of the host word to *ä* as did Ch’ol. The result was that the compound word for the “day before yesterday” became *chäb’i*. Now the only way to distinguish between these two words with opposite meanings in Chontal is by the length of the root vowel. The historical difference between the two related enclitics is no longer directly evident on this word pair at all but now lies instead in the root vowel itself rather than in the attached enclitic. There is little doubt that in modern Ch’ol and Chontal there is no evidence that a morpheme meaning “day” is necessary to indicate a “day before yesterday” or a “day after tomorrow.” Needless to say, I do not think the need was there in Classic Ch’olan either.

5.2.3.5 Forms of Past Enclitic on Numbers and Temporal Nouns in Classic Ch'olan

As already noted, the most common form of *winik* in a compound with the temporal deictic enclitic attached in Classic Ch'olan is **WINIK-ji-ya** and its most likely transcription is *winikjiy* (cf. Figure 202 above). It has also been noted that the usual form of the enclitic with the time-period *haab'* is **HAAB'-ya**, giving *haab'iiy* (cf. Figure 200). There are indeed a significant number of examples of both time-period compounds with the alternate forms. *Winikiiy* written glyphically as **WINIK-ya** can be seen in Figures 208 and 209. *Haab'jiy* written as **HAAB'-ji-ya** appears in Figure 209.

These alternate forms are not as common but occur too often to be considered rare. For this reason, any explanation of either compound must be able to accommodate both forms.¹⁹⁴ Failure to take such attestations into account can lead not to a clearer view of how these constructions operate, but rather to oversimplifications, over-generalizations, and premature conclusions. I have found no

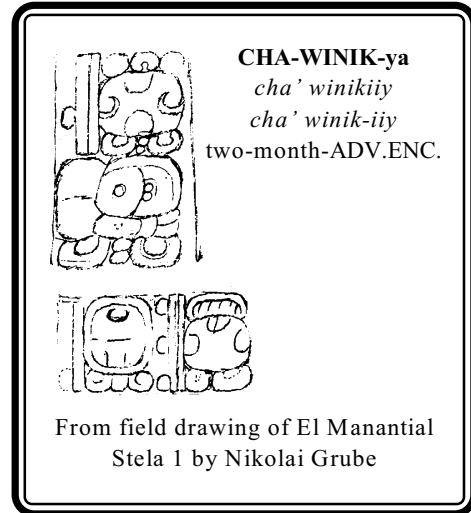


Figure 209. *Winikiiy* written with short allomorph of past-temporal enclitic

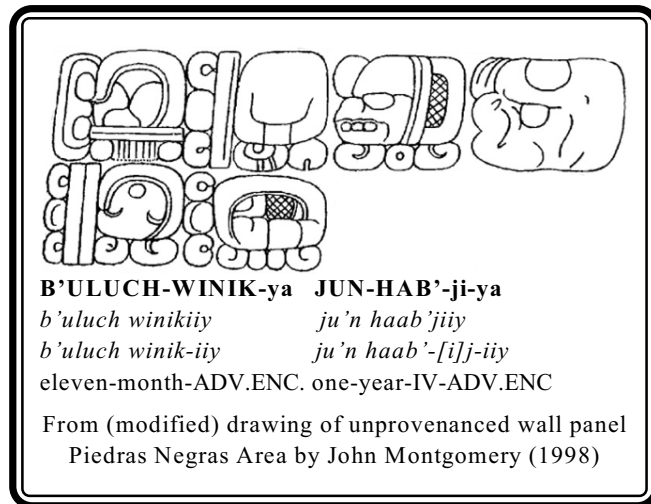


Figure 208. *Winikiiy* with short and *haab'jiy* with long form of the past temporal enclitic

¹⁹⁴The **WINIK-ya** and **HAB'-ji-ya** forms both provide additional evidence against a “day” or even “TIME UNIT” meaning for *-ij* or *-iij*. If in these cases it indeed meant day, it would be lacking on *winik* where it would be needed and would be present on *haab'* where it would not. .

difference in the meaning or connotation of passages using the various possible combinations of the past enclitic on count-away-from distance numbers. Therefore, any valid interpretation must accommodate both.

A remaining question concerns how to correctly transcribe the **WINIK-ji-ya** and **HAB'-ji-ya** collocations. When a logogram (CVC or CVCVC) is followed by a single CV syllable, the issue of how to transcribe that final syllable always arises. In the example of the non-past/future deictic enclitic shown in Figure 199, **WINIK-ji** has been transcribed as *winikij*. Although there are no examples of that collocation written syllabically, Figure 197 shown earlier includes a similar compound with the preceding syllable written syllabically as **b'i** in **CHA'-b'i-ji**. Since it also has the non-past/future deictic enclitic attached, as indicated by the context, and it is usual to exclude the vowel of the final syllable in transcriptions, it is likely that **WINIK-ji** is meant to spell *winikij*. The etymology of the non-past/future temporal deictic enclitic used in count-toward distance numbers supports this interpretation.

It would seem then, that the intended transcription of **WINIK-ji-ya** might be *≠winikijiiy*. If so, it would reflect a complete spelling of the long form of the enclitic, but would also require that the reader insert an additional *i*. Problematic is the lack of direct evidence for its presence in this case, leaving one with only an etymological argument. Direct evidence might consist of either a syllabic spelling of this or a similar collocation or the use of a **ki** syllable following the logogram to join with **ji-ya** to explicitly provide the full version. Neither has been found.

It is not unusual for a vowel to be shortened and even elided when enclitics are attached or suffixes added. Such shortening and elision is characteristic of most Mayan languages because the stress is typically on the last syllable of a word or compound. So

although the non-past or future enclitic does occur as *-ij* on *winikij*, when the *-iiy* is added to a word that is already two syllables long, it is very understandable that the first vowel of the enclitic might elide.¹⁹⁵ This phenomenon also occurs as well in other multisyllabic compounds and inflected or derived words. Nothing beyond this is required to justify this conclusion.

However, there is also some evidence that the final consonant of the stem *winik* might also play a role. If the initial *i* of the enclitic is not meant to be included, it may be the phonetic character of the consonant with which the word *winik* ends that causes this. Figure 210 shows a number plus enclitic compound that follows

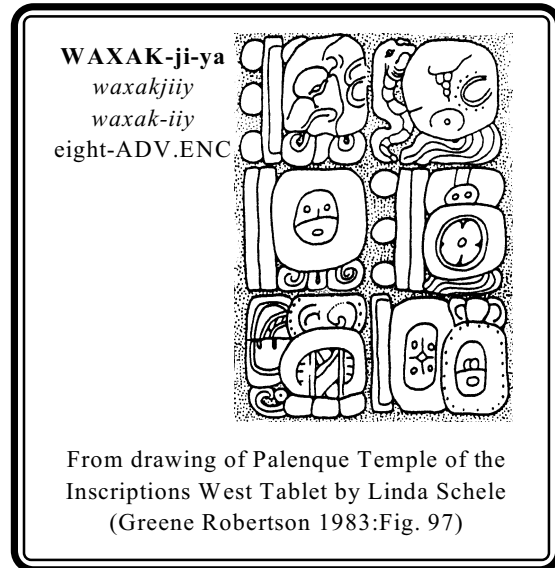


Figure 210. Compound with past temporal enclitic attached to number with final *k*

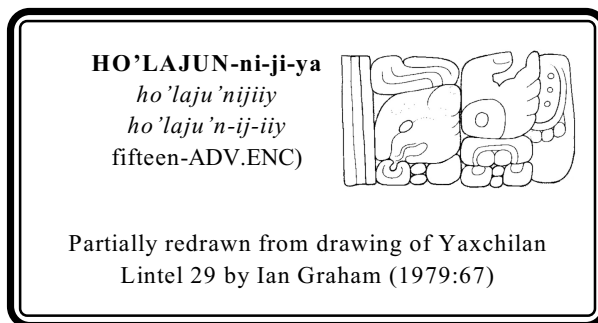


Figure 211. Number with final *-n* and long form of past temporal enclitic

the same pattern as the *winik* plus enclitic compound. The lexical stem of the word, **WAXAK-ji-ya** > *waxak-jiiy* ends in a /k/ as well.

The possibility that the quality of the final consonant may affect the form taken by the in-the-past enclitic in

¹⁹⁵Some might consider this instead to be *winikij* reflecting its length in Proto-Mayan as reconstructed for languages that still regularly exhibit vowel length or complex vowels. However, there is no actual evidence that this suffix should be transcribed as *-iiy* even if one employs the rules suggested by Lacadena and Wichmann (2004). In order to signal a long vowel according to their theory, the enclitic would have to be signaled graphically with the syllable **ja** instead of **ji**. Instead, it is quite clear that the syllable **ji** is meant to write the vowel *-i* and consonant *-j* of the enclitic. That it would shorten to *-i* with the addition of the enclitic *-iiy* or *-iy* is to be expected. However, since it is likely short already, the attachment of the additional syllable of the compound enclitic has pressured it to elide.

such count-away-from contexts is increased by examples of numbers that end in different consonants, such as that in Figure 211. When the lexical stem of the number to which the enclitic is attached ends in /n/, the scribes very often make sure the reader is confronted by the complete form of the *-ijiiy* deictic enclitic. In this example, there is no doubt that the scribe intended it to be read *holajunijiiy*, very much unlike the *winik* and *haab'* examples.¹⁹⁶ Considering all the opportunities for them to have written either *winik* and *haab'* with a **ki** or **b'i** syllable respectively following the logogram, the conclusion that the first *i* of the enclitic was intentionally omitted is well justified. But the converse is also likely, that is, the examples written with a **ni** sign following a number with final /n/ display the intent of the Classic Period scribes to write the full form of the past temporal deictic enclitic.

5.2.4 Evidence for *-o'm* as Intransitive Resultative Instead of Future Inflection in Classic Ch'olan

The previous discussion concerning the function the temporal enclitics in the Classic Period texts has highlighted their importance in the Classic Period texts. They serve to indicate the temporal flow of the discourse as well as to relate the reported events to each other along a timeline. As already noted, *uhto'm* has been offered by others as an example of future tense or of a future participle in the Classic texts. However, I have presented evidence from related Greater Tzeltalan languages that an *-om* suffix on intransitive verbs can derive stative participles and inflect intransitive verbs for the resultative aspect. However, neither of these is directly connected with future tense or

¹⁹⁶Such examples also provide evidence that a syllable beginning with the same consonant that ends a logogram is often *not* intended to serve simply as a phonetic complement. In contexts without the enclitic, the syllable **ni** does not appear after the same numbers. If it really were written simply to indicate the final consonant of the logogram, one would expect it to appear in those contexts as well. Instead, this technique is another example of a straightforward way to indicate what the next vowel sound after the logogram should be. Employing a syllable that begins with the logogram-final consonant avoids the intrusion of an unwanted letter because duplicate consonants are not indicative of a change in pronunciation and are not morphemic in Classic Ch'olan. This technique is often used to write various status markers on verbs as well. The clarity of purpose that is evident from these examples on numbers can be used as supporting evidence that similar spellings on verbs are meant to be interpreted in the same way.

with a proposed future of necessity (*futuro en ruz*). Since the conclusion that Classic Ch'olan *-o'm* is a future tense marker or future-perfect participle suffix was first based mainly upon the contexts in which it appeared on the verb stem *uht-*, some of those contexts will be examined first. These will be followed by examples of other verb stems that appear with the *-o'm* suffix in the Classic Period texts.

Distance numbers are often used to measure the length of time between two events. Many times, both events making up the pairs are actual non-calendrical events such as births, accessions, captures, and deaths. However, quite often, one of these events, usually the later of the two, is simply a calendrical event such as the end or completion of a specific time-period. The choices of which period-ending dates to record were more regular at some sites than others. For example, as noted almost a half-century ago by Tatiana Proskouriakoff (1960), for a period of time, rulers at Piedras Negras erected stelae every quarter score of 360-day years. In the texts carved onto those monuments, the important events that occurred during each five-year period were reported, dated, and connected with the completion of each specific time period, usually by distance numbers. At some other sites, the chosen period endings varied from ruler to ruler. Relatively often, the reports located these events within a larger time frame by explicitly stating the elapsed time between them and a specific period-ending date. Sometimes these period endings were set quite far into the future compared to the non-calendrical events reported on a particular monument. Other period-endings used for such purposes were much closer to the time of the main event.

The period-ending dates often chosen as the temporal framework may be in the past, present, or future in relation to the probable time of the carving or erection of a monument. However, more important for the present purposes is the discursive time frame. Many events, especially in longer inscriptions, are placed in relationship to each other. Also often, each event is accompanied by a date, usually consisting of a "Calendar Round." The first part, nicknamed the "*Tzolk'in*" ("count of days") by some Mayanists, is made up of a number from one to thirteen and one of twenty day names in the 260-day

calendar. The second part consists of a number from one to twenty and one of 18 names of a twenty-day period or numbers from one to five along with a name for that short period of five days to make up a 365-day *haab* ‘year.’ These dates sometimes occur in normal progression from oldest to youngest, but can also proceed in the opposite direction or may vary back and forth throughout the text.

Still, it is not only the direction of the date sequences that determines the direction of the discourse time. Instead, just as with discourse in any language, it is how the information is presented that determines the temporal progression back and forth. We have already seen that the enclitics *-ijj* (or *-ij* without vowel length) and *-ijiiy* ∞ *-iiy* (or *-ijiy* ∞ *-iy* without vowel length) used with a distance number indicate a count away from the date of an event or a count toward the date of another event. In other words, they provide all the information necessary to determine the temporal progression of the discourse. The question to be addressed now is what role the suffix *-o'm* plays in passages that include these enclitics.

(9.14.13.0.0)

**CHA' UX WINIK-ji 'u-to-ma WAK AJAW WAXAK
CHAK UXLAJUN TUN-ni**

*cha' [k'in] ux winikij uhto 'm wak ajaw waxak chak
siho 'm uxlaju 'n tuun*

It will be 2 days and 3 months before it occurs [is in the
state of having occurred] 6 *Ajaw* 8 *Chak Siho 'm* (*Kej*),
the 13th *tuun*.

From drawing of Palenque Temple XVIII Censer Stand
by Linda Schele (Schele and Matthews 1979:Nr.391)



Figure 212. Enclitic *-ij* indicating count points toward next date

5.2.4.1 Resultative Interpretation at Least as Valid as Future

5.2.4.1.1 Palenque Temple XVIII Censer Stand

The first two examples have been chosen to demonstrate that the sense of each passage can be gained just as well if one interprets *uhto 'm* as an intransitive resultative form rather than a future form. They do not on their own provide sufficient evidence against interpreting *uhto 'm* as a future form, but rather demonstrate that either interpretation is possible. These are passages in which the distance numbers count toward a later time, the future, or beyond the time from which the count starts, and the verb has an *-o 'm* suffix. What is important to note for the present purposes, is that the presence of the non-past enclitic or the lack of any temporal enclitic on the time-period nouns is

already sufficient to indicate that the count proceeds toward the later or future date without relying on the presence of the *-o'm* suffix.

The first passage shown in Figure 212 indicates that the referent date or event was 2 days and 3 months before the Calendar-Round date 6 *Ajaw*, 8 *Kej*, which is the 13th *tuun* in the *winikhaab'*. That the date was in the discursive future is already indicated by the *-ij* time-before or non-past/future enclitic on the distance number. The *-o'm* suffix on the verb *uht*, if it were indeed future, would then be either corroborative or redundant. I believe it is neither although this particular passage alone does not rule that out. However, since an additional indicator of future time is not necessary here, I suggest instead that *-o'm* on *uhto'm* here **is** an indication of a resultative. It helps to stress the certainty that the date will be in the "state of occurring or having occurred" at precisely the time interval provided. What it provides, then, is not the information that the date is in the future, but rather it helps to emphasize the veracity of the interval. However, it is the enclitic *-ij* that indicates that the count points toward the coming date while it is the *-o'm* resultative suffix that provides the assurance that the count results in that specific date.

Although the interpretation of the *-o'm* suffix in this context depends upon one's hypothesis, both are plausible assuming no evidence beyond this particular passage. According to the hypothesis proposed here, the time-before count is indicated by the non-past or future enclitic *-ij* alone or by the absence of either the time-before or time-after enclitics. The use of the resultative suffix emphasizes "the state of occurring or having occurred" but otherwise leaves open the temporal location of the event in the discourse timeline. With distance numbers this small, 62 days total, emphasizing futurity seems less likely to be as important except to make it clear that the event, perhaps the dedication of the censer (incensario), occurred 62 days before the 13 *tuun* date. So no matter how one interprets *uhto'm*, it is the link to the period-ending date that is important. Although *winikhaab'* ("score years"), half *winikhaab'*, and quarter *winikhaab'* are more common, tying an event to the 13th *tuun* ("stone" referring to "year") is not unique.

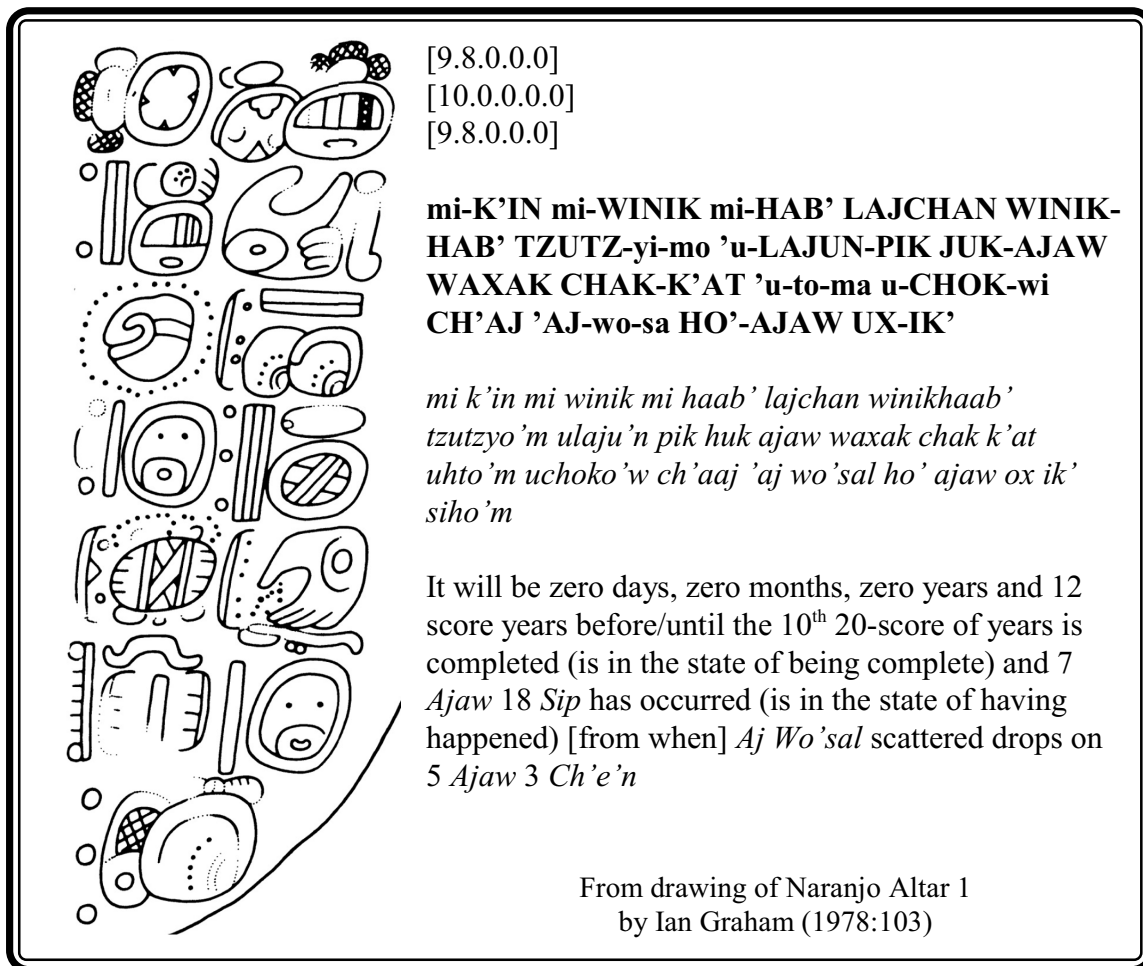


Figure 213. Absence of temporal enclitic on time-periods indicates count **toward** next date

5.2.4.1.2 Naranjo Altar 1

It should be noted first that the passage from Naranjo Altar 1 in Figure 213, especially the part involving the verb *uhto 'm*, could be interpreted in more than one way. Intransitive verbs including *uht* almost always precede their nominal subjects when explicitly written. When it is obvious from the context, the nominal subjects may be excluded leaving only the absolutive pronoun subject behind. In the case of a 3rd person singular subject, that pronoun would be unmarked. However, most of those exceptions involve a person whose name has been mentioned explicitly in a previous passage. If

indeed the calendar-round date is the subject, it precedes the verb *uhto 'm* and could just as well be part of the phrase identifying the date corresponding to the 10th *pik* (“*b'aktun*”) whose completion was just noted. If so, that portion might be translated instead as “before the 10th 20-score years is in the state of being completed on 7 *Ajaw* 18 *Sip*.” In that case, the subject would then have to be what follows the verb *uhto 'm*.

What follows is **'u-CHOK-wi** *uchoko 'w*. Although there is a nominal form in *-wi* that occurs in Ch'orti', there seems otherwise to be little evidence that it occurs in Classic Ch'olan. Also, it has already been noted above that **wi** and **wa** alternate in writing the antipassive form in *-V_iw* (as proposed by Lacadena 2000). Alternatively, since glyphic **wi** is used in Classic Ch'olan to write an antipassive, the question also arises as to whether **'u-CHOK-wi** might be writing an antipassive in *-ow* (or perhaps *-oow*) here as well. However, if so, the presence of the 3rd singular ergative would make it a possessed antipassive. But an antipassive verb could only be possessed if it were first nominalized and there is no derivational suffix present that could derive it in this case. In light of the arguments presented above against the same derivational suffix deriving both an antipassive verb and a noun at the same time, this analysis must be rejected as well. That leaves one with the original interpretation presented above, that it is indeed a transitive verb with the root transitive status marker written using **wi** instead of **wa**.

The subject of the verb *tzutzyo 'm* is the 10th of the 20-score years period and the subject of *uhto 'm* is the Calendar-Round date. The verb that follows is *uchoko 'w* and the drops in the hand likely serve as the logogram **CH'AJ** as argued earlier for this particular logogram. If not, the drops would be mentioned only pronominally in the 3rd singular unmarked form. The latter is highly unlikely considering the care usually taken by the scribes to either write the word *ch'aj* syllabically or to write *ch'aj* using the drops as a logogram.

Although *uchoko 'w* is written with a rare final **wi** variant instead of with **wa**, the spelling in this inscription contains other rare variants as well, probably due partially to its somewhat early creation date. The verb *tzutzyo 'm* in the second sentence above this

one is an example of the *-o'm* resultative written instead using **mo** instead of **ma**. Because of that spelling, this occurrence should probably be transcribed as *tzutzyom* instead of *tzutzyo'm*. However, by comparison, the normal spelling of *uhto'm* as '**u-to-ma** raises doubts as to the correct spelling.

Just as in the previously presented passage, this one allows for an interpretation of intransitive verbs in *-o'm* as representing either resultative or future inflection. The purpose of presenting it here is simply to show that, given the existence in Colonial Tzotzil of an *-om* predecessor to the Tzeltalan *-em* resultative, it fits in well even in such passages as these.

Because Altar 1 of Naranjo is a monument evidently commissioned by *Aj Wo'sal*, it is clear that the 10th 20-score year (*pik*) date would occur long after the message on the monument was carved. But that future projection, in this case extra-textual as well as discursive, is already indicated by the lack of the past enclitic on the time periods which indicates a count towards a date in the context of distance numbers. The translation offered here provides the rationale for both counting forward to a future period-ending and for interpreting the *-o'm* suffix as an indicator of the intransitive resultative rather than the future. Here it serves to stress the position of the event referred to, the drops throwing, in relation to the eventual completion of the 10th 20-score year period and the Calendar-Round date on which it falls. Overall, the intention is to place the earlier, more current event, *Aj Wo'sal's* scattering ritual on the 8th *winikhaab'* ("*k'atun*") ending within the even larger time frame of the 10th *pik* ("*b'aktun*") ending which would occur about 240 years later. The emphasis is not on the futurity of the date of the 10th *b'aktun*, but rather the secure placement of the current event into the overall time frame of the calendar. It is the position of the current events within that measure of time that is the prime interest of the ruler and not the prediction of a calendar date's certain arrival in the future that merits attention in this and many other similar references to future period-endings.

5.2.4.2 Distance Number Context with *o'm* Suffix and Count Away from Earlier Date

The second set of examples includes passages that have a past temporal enclitic on time-period nouns but still have the *-o'm* suffix on the following verb. In the context of distance numbers, this indicates a count away from a previous date. Passages such as these are very important in the present context especially because they do not follow the pattern usually expected in the Classic-Period texts. Here a distance number using the past temporal enclitic ends at a sentence beginning with the verb form *uhto'm*. In most cases, distance numbers with past or back-reference enclitics lead away from the previous event and into an *uhti*, *i uhti*, or *uhtiy . . . i uhti* combination. Yet in such passages, the event date is also later or “in the future” compared to the date from which the distance number is counting (see Figure 201 for an example). It is quite evident that future inflection is not required in such contexts and, as the examples should show, is not as compatible in a count-away-from context such as this. There is no demonstrable need or reason here to analyze *uhto'm* as a future form in these contexts. It is instead the enclitic *-ijiy* ∞ *i iy* that brings the reader from the earlier date or event to the one that is later and from which the count started. The resultative, by comparison, does add something to the context. It helps by supplying a connotation of assurance that these important events did indeed occur at a precise point within that larger calendrical time frame and that the temporal distance to the specific time-period ending is precisely interval stated. This connotation is one that was likely very important for the author and commissioner of the text.

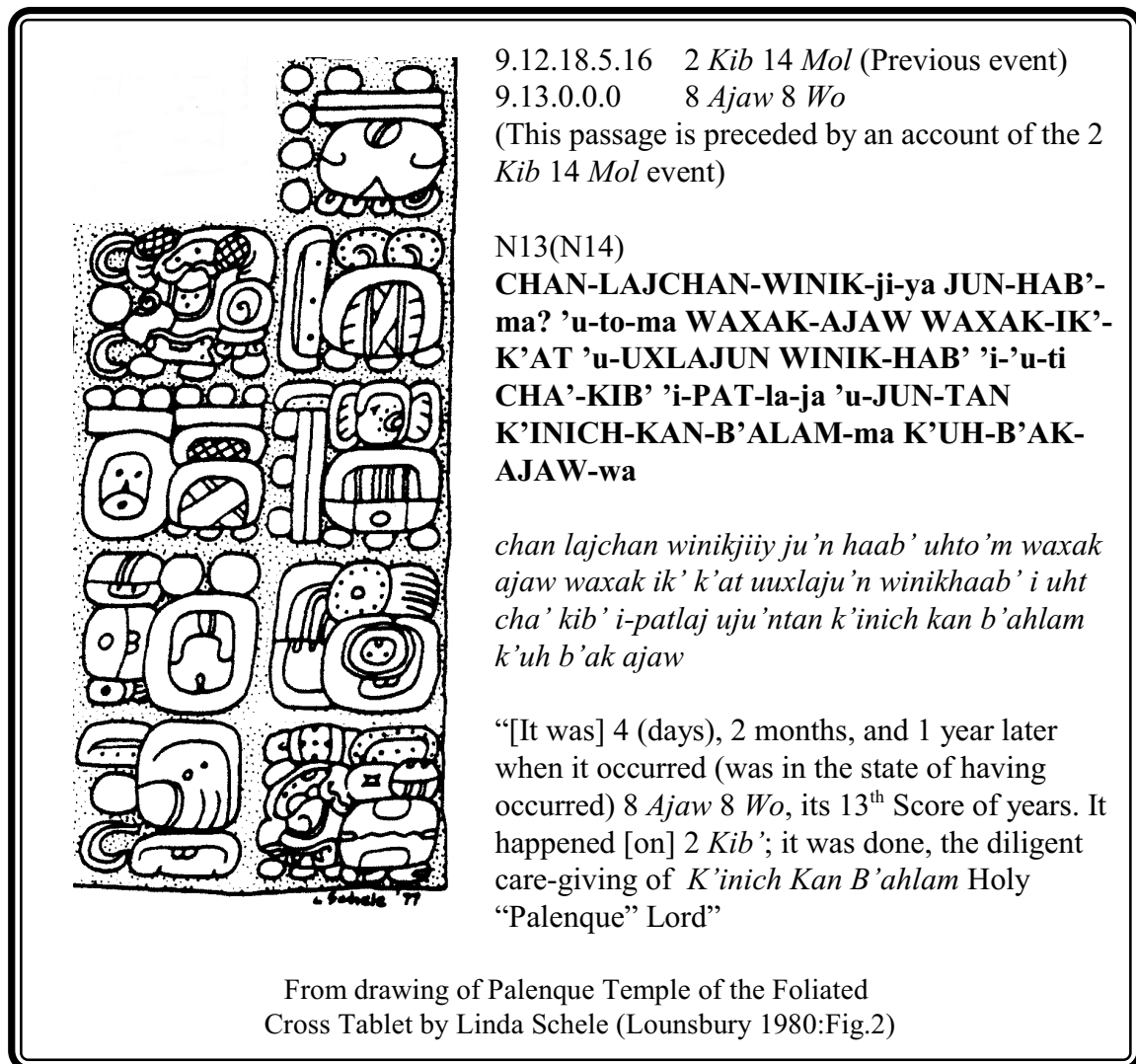


Figure 214. Enclitic *-jiy* on distance number indicates count away from last date, but next date still preceded by *uhto'm*

5.2.4.2.1 Palenque Temple of the Foliated Cross Tablet

It is important to note the presence of **ji-ya** on the **WINIK** glyph spelling *winikjiy* in Figure 214. The enclitic indicates the temporal direction of the sentence’s 3rd person singular dependent pronoun’s referent. The directional count is away from a previous event. That most often results in the report of the next event on the narrative timeline, in

this case the date, by using the verb phrase *uhti* or *i uhti* (**'i u-ti**). In some circumstances such an event or date is actually an earlier date, in which case one would expect *uhtiiy* (**'u-ti-ya**). That is clearly not the case here since the date is later than the one away from which the distance number is counting. For anyone interpreting *-o'm* as future inflection or as a future participle, the presence of **WINIK-ji-ya** *winikjiy* in the distance number is therefore somewhat surprising. In such contexts, distance numbers counting away from an earlier event do not usually lead into a verb with an *-o'm* suffix.

In short, this passage lacks the characteristics which led epigraphers to conclude that *uhto'm* represents a future participle or a verb inflected for future tense. Translations of passages such as this one into English usually employ adverbs such as “later” or “ago” or prepositions such as “after.” All of these are acceptable insofar as they correctly identify the direction of the temporal location of the previous event or date that is the point of reference. However, none of them seem appropriate if one then nevertheless translates the verb in the next event or date, the one at which the count arrives, as being in the future tense. The following possible attempts help to indicate their problematic character. The translations “[It was/is] 4 [days], 2 months, and 1 year later [when/then] it will come to be 8 *Ajaw* 8 *Wo* . . . ,” “[It was/is] 4 [days], 2 months, and 1 year ago [when/then] it will come to be 8 *Ajaw* 8 *Wo* . . . ,” and “[It was/is] 4 [days], 2 months, and 1 year after [when/then] it will come to be 8 *Ajaw* 8 *Wo* . . . ,” do not seem to work well. This is **not because English grammar is different** from Classic Ch'olan (although it is), but because they are attempts to combine constructions that do not fit well together in either language. The sense of “it was” is inserted into the English translation because of the temporal directionality indicated by the back-reference enclitic and it is precisely the incompatibility of this back reference with the supposed future tense connotations of *uhto'm* “will come to be” that causes the disjunction here. Replacing “it was” by “it is,” besides being inappropriate in these contexts, would still not help enough to remove the incongruity.

Unlike the future tense, the resultative aspect is flexible as to temporal position because it is not inflected for tense. This allows its use in various temporal contexts. It connotes, as has already been discussed, that a state exists as the result of an action. In this case, the period-ending date, and so also the completion of the 13th score of years, the *winikhaab'*, is in the precise stated position in regard to the earlier event. Although presented from a different position within the temporal discursive timeline compared to the two previous examples in Figure 212 and 213, it also reflects the author's assurance of the earlier event's placement in the overall time frame of the calendar.

In all this, the center of attention is the 2 *Kib'* 14 *Mol* event which is why it is repeated again at the end of this inscription. In this passage, it is also being placed temporally into the context of the 13th score of years within the *pih* ("b'aktun"), the twenty-score years time period. What is more, it is likely that the 13th score of years is the period ending for which this monument was prepared and its inscription carved. So while the 13th score of years was indeed later than the 2 *Kib'* 14 *Mol* event, it is not likely to be later than the occasion for the carving of this monument. This later position on the timeline was indicated by the past temporal enclitic on a distance number count away from the date of the earlier event, an event mentioned again following the tie-in to the 13th *winikhaab'*. The temporal relationship between the two events is indicated by the past enclitic on the distance number and not by future verbal inflection or a future participle.

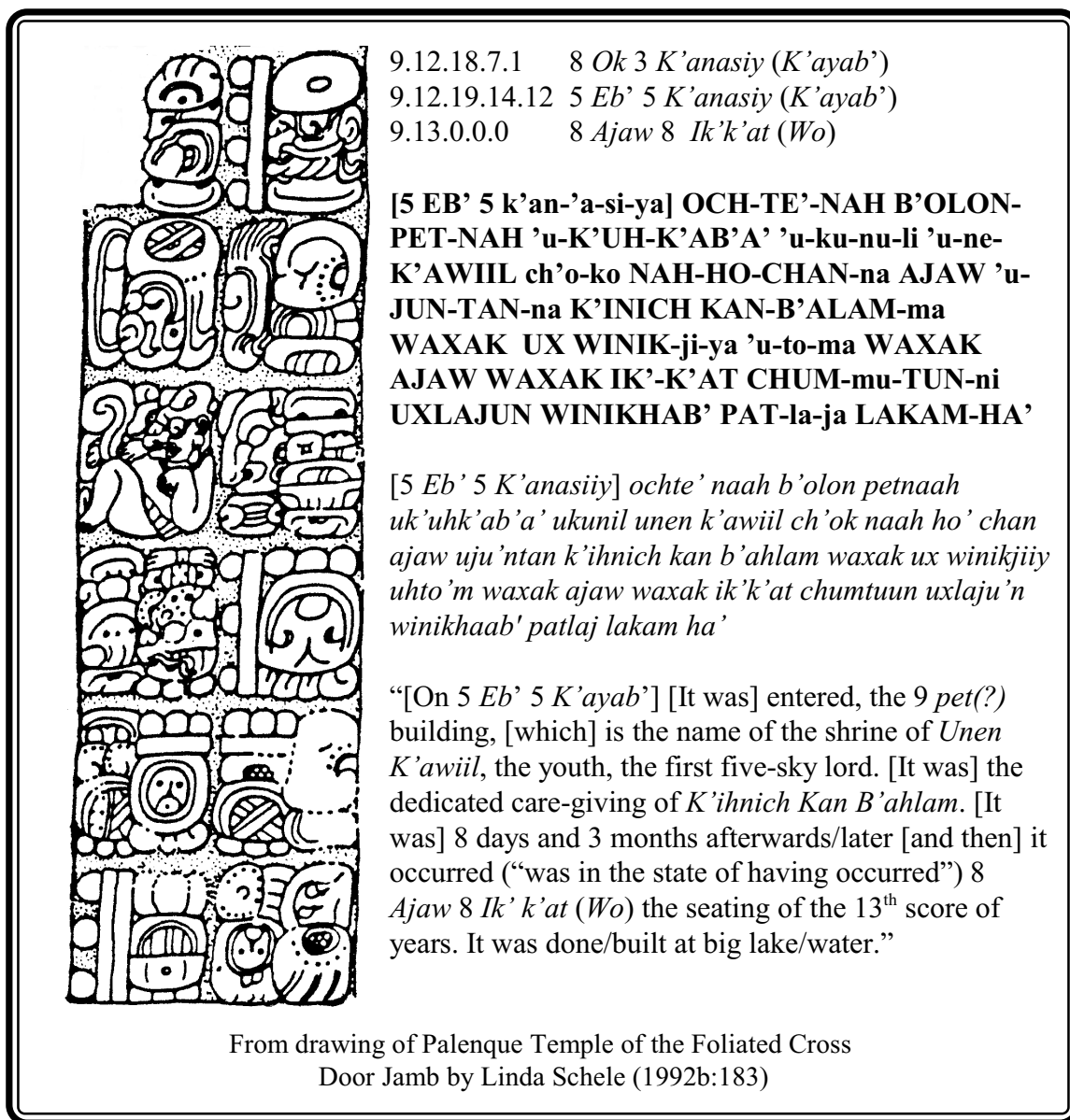


Figure 215. Enclitic *-ijiiy* on distance number indicates count away from previous date but later date still reported using *uhto'm*

5.2.4.2.2 Palenque Temple of the Foliated Cross Door Jamb

The passage in Figure 215 represents another case in which the *-ijiiy* ∞ *-iiy* enclitic indicates that the distance number is measuring time away from a previous event making

it difficult to accept a future tense or future participial interpretation of *uhto'm*. There is no question but that the date 9.13.0.0.0 8 *Ajaw* 8 *Wo* is 68 days later than the previous one on which the building dedication or entry occurred on 9.12.19.14.12 5 *Eb'* 5 *K'ayab'*. But it is of utmost importance to also notice that this is, in all relevant aspects, the same as many other passages in the Classic-Period inscriptions such as that in Figure 216 which do not use the *-o'm* suffix on the verbs.

In the Figure 216 passage from the Palenque Palace Tablet just as on the TFC door jamb passage in Figure 215, the count leads **away from** the date of the previous event. Here on the Palace Tablet, that previous event took place on 9.11.13.0.0 (August 2, A.D. 665) and leads into a later, that is, a future date. But the same verb stem *uht* does not take the suffix *-o'm* but rather the usual *'u-ti* form along with a preceding *'i* for *i uhti*. The *i*, which can be translated approximately as “and then” (cf. Josserrand 1991:14), highlights or emphasizes the reported event which here is the occurrence of the particular Calendar Round date 6 *Etz'nab'* 11 *Yax* on 9.12.11.5.18 (August 26, A.D. 683). The next verb clarifies that the event which happened on this date is the death of *K'ihnich Janaab' Pakal*, the father of the ruler *K'an Joy Chitam* who is the subject of the event in the previous passage,

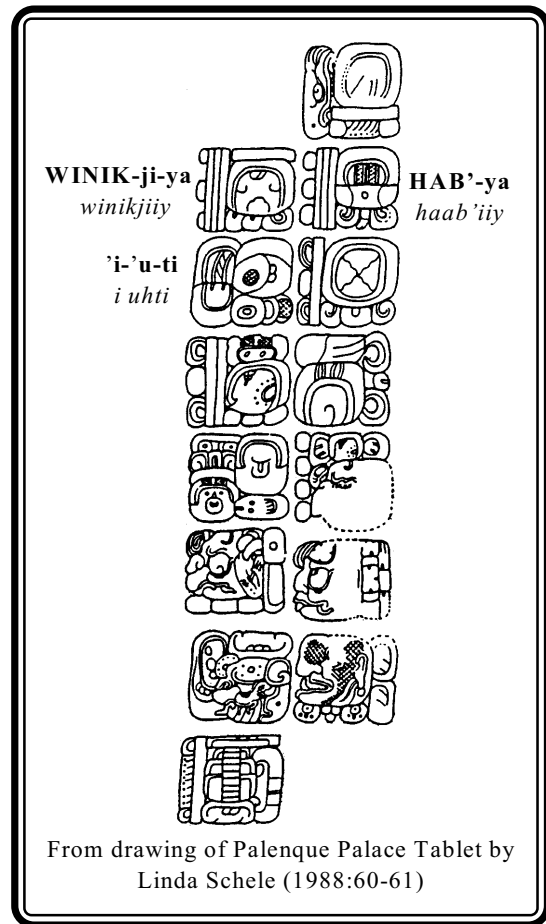


Figure 216. Common pattern with *i uhti* preceding later date after enclitic *-ijiiy* ∞ *-iiy* on distance number indicates count away from previous date

not shown here, his taking or receiving of a particular office as a youth.¹⁹⁷ It situates temporally the son's taking of that office relative to the death of his father. That death happens in the future in relation to the son's ceremony.

The format of this Palenque Palace Tablet passage and the affixes employed in writing it are the norm. The *uhto 'm* verb form in the TFC Door Jamb passage is much less frequently encountered than *uhti* or *i uhti* and is seldom paired with the past enclitic on a distance number. Nevertheless, it does occur here and elsewhere, and that is a serious problem for the future or future participle interpretation. Clearly, the difference between the two passages is **not** that the later date is in the future compared to the previous one on the TFC Door Jamb since this is true in both inscriptions. In **both cases the count is away from** the earlier date. In **both cases the second date is in the future** compared to the first.

What then is the difference between the contexts of these two passages? In one the verb *uht* appears with the root intransitive status marker *-i* and a preceding conjunction *i* serving as a discourse marker. In the other, the verb *uht* appears with the suffix *-o 'm* which I have analyzed as an intransitive resultative suffix and others have designated as either future inflection or a future participial derivational suffix. In both cases, the date that serves as the subject of the verb is later than the previous date. In both, the count is away from the date of the last event, not towards it. The critical difference is not that on the Palace Tablet the date is not in the future based upon the time of the carving but on the Palenque TFC Door Jamb it is. In the TFC Door Jamb inscription with *uhto 'm*, the later date is only sixty-eight days removed whereas in the Palace Table, with *i uhti* instead, is it over eighteen years in the future. Often the arguments for *uhto 'm* representing future tense are based upon cases where the future date is scores or even thousands of years removed. However, such arguments are beside the point. Instead, the

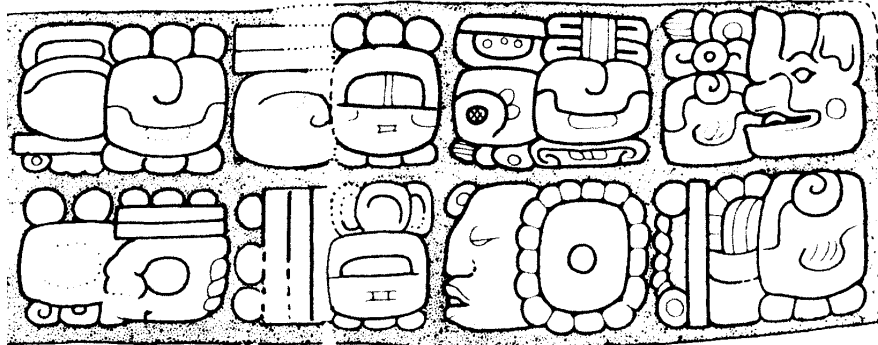
¹⁹⁷The event is 'u-CHAM-wa CHAN-nu *uch 'ama 'w cha 'n* "he took a master(?) ("snake"?)." Schele (1988:71) had earlier interpreted this as referring to a God-K (*k 'awiil*) scepter. However, this spelling of *cha 'n* with **nu** occurs often elsewhere in phrases referring to captured elites from other sites. In those cases it usually means "master."

critical difference is that on the TFC Door Jamb, the intent is **to tie the event into a larger Long-Count calendar date**, almost always a significant period ending. On the Palace Tablet the later date is also an important event but not a calendrical event meant to place the previous event in the larger calendrical schematic. So the choice of using *i uhti* on the Palace Tablet emphasizes performance of a ceremony involving the future ruler as having taken place long before the death of his father. The choice of presentation on the TFC Door Jamb using *uhto 'm* emphasizes the assurance of the event's placement in time by counting away from it to the closest appropriate Calendar-Round date which, by no means accidentally, is also the completion of a Long-Count period ending. The form *uhto 'm* does not serve to indicate futurity and, in fact, the specific grammatical and discursive context of this passage offers little or no support for such an interpretation. It points instead toward the resultative character of this verb form which emphasizes the stative rather than the active connotations, thereby securing its place at least in the history of measured time.

In sum, the passage in Figure 215 and the one preceding it in Figure 214 provide important examples of contexts in which a resultative interpretation of *-o 'm* works much better than a future interpretation which does not work well here at all. Most count-away-from distance numbers with back-reference enclitics lead into *uht*, *i uht*, or *uhti* . . . *uht* combinations and the dates of the following events are later or “in-the-future” from the standpoint of those previous events and dates. In these two examples, the period-ending date is relatively less far removed from the previous date than in the previous two examples in Figure 212 and Figure 213. Also, the past enclitic on the distance number has already set up the direction of the temporal distance pointing back to the previous event and date, making a future morpheme a poor fit.

5.2.4.3 Distance Number Context with Count Toward Later Date but *uhto'm* Not Present

The next set of examples presents a discursive context that is the converse of the previous one. These are examples of passages in which either the non-past temporal enclitic or the lack of a temporal enclitic attached to time-period nouns in a distance number indicates a count-forward-toward the time of the next event but the verb stem *uht* does not carry the *-o'm* suffix as one might expect if it were future inflection. The question then becomes, if these passages would otherwise call for future tense inflection or a future participle, why would it be absent in passages such as these that meet precisely the criteria for future tense.



Seibal Hieroglyphic Stairway 1 Step 9

Dates on Hieroglyphic Stairway:

Step 1 - ISIG 9.15.13.13.0; Step 3 - 9.15.14.17.18; Step 4 - 9.15.15.0.0; Step 6 - 9.15.16.7.17; Step 7 - 8.18.19.8.7; Step 8 - 8.19.0.0.0; 9.15.16.7.17;

Step 9 - 9.16.0.0.0

**'u-TZ'AK-'AJ 'UX e'-wa LAJUN WINIK 'UX HAB' CHA' 'AJAW
'UXLAJUN KASEW WAKLAJUN WINIK-HAB' 'i-'u-ti che-'e-na ti-yu-lu-
xu? (?yuxul?) "YAX B'ALAM-MO' 'AJ K'UH-lu**

*utz'akaj ux e'w laju'n winik ux haab' cha' ajaw uxlaju'n kase'w waklaju'n
winikhaab' i uht che'en ti yu-xul? yax b'ahlam mo' ajk'uhul*

["Its count"] will be 3 days, 10 months, and 3 years until 2 *Ajaw* 13 *Kase'w* (*Sek*) the 16th Score of years and then it [will] happen [the] telling on the carving of *Yax B'ahlam Mo'* the holy one.

["Its count"] was 3 days, 10 months, and 3 years before 2 *Ajaw* 13 *Kase'w*, the 16th Score of years and then it came about the telling on the carving of *Yax B'ahlam Mo'* the holy one.

From drawing of Seibal Hieroglyphic Stairway 1 Step 9 by James Porter (Graham 1990:11)

Figure 217. Distance number with count toward later date but no *o'm* suffix on *uht*

5.2.4.3.1 Seibal Hieroglyphic Stairway, Step 9

The passage shown in Figure 217 is important for comparison with passages containing verbs that, unlike it, do employ *-o'm*. It is similar to many of them because neither the *winik* nor the *haab'* glyph have the past temporal enclitic attached. The lack

of that adverbial enclitic indicates a count **toward** the next date rather than one away from the previous date, that is, movement toward a discourse internal or external time in the discursive future. The lack of a temporal enclitic indicates by default that the dependent pronoun – in this case the 3rd person singular absolutive unmarked pronoun – points forward to its referent. A translation of this portion might be “and then it will happen, the telling on the carving of *Yax B’ahlam Mo’* the holy one.” It could also be translated as “and then it happened the telling on the carving” depending upon the phraseology of the preceding English translation. Although I do not want to imply that using the future in English is the only way to translate this passage, I do think the format of the distance numbers and the context and make it an accurate one. The connotation of the adverb “before” in the first translation brings about the second temporal rendition in English. It should be noted that unlike other similar passages, such as the one in the next example, the event to which the distance number leads is not a previously reported event nor is it an earlier event at all. The previous event, whose date on the previous Tablet 8 can be reached by subtracting the distance number from the current date here of 9.16.0.0.0, is almost surely a different event altogether. Although the glyphs naming the event itself are too weathered to read, the nominal subject’s name is quite different from that of this last passage. The person mentioned here, *Yax B’ahlam Mo’* is more likely the one who wrote, carved, or was in charge of the actual carving.

It is also more likely that an event referring to the writing in the carving, probably on this very stairway, would be the last event and would not be a repetition of a previous one. Those earlier passages concern the royal events that this monument was originally meant to report. We have already noted that Calendar-Round completion events are often chosen as occasions for erecting monuments. With this in mind, the 16th *Winikhaab’* (“*k’atun*”) was the one likely chosen for the erection or dedication of the stairway of which this step is the last of nine. We have seen that it is often *uhto’**m* that is used as the verb form in precisely these circumstances. Its presence in those contexts has led epigraphers to conclude that the *-o’**m* suffix must be what signals the future. However,

uhto 'm does not occur here. Instead, it is *i uhti* that is used in a context that clearly connotes the discursive future.

Indeed, it is *i uhti* that is often used to highlight events which usually, but not always, occur later than the previously reported event. However, there other passages using *i uhti* which have as their subjects events that are not the latest but rather events that are being emphasized as important. There may also be more than one event emphasized in that way on the same monument, as there is on this one although those passages not shown here. This means that it is not *i uhti* just as it is not *uhto 'm* which provides the discursive future indication in other texts. Rather it is the structure of the passages and the non-past enclitic or lack of a temporal enclitic on the time-period nouns of the count-toward distance numbers, as in this case, that provide what can then be translated as future tense in English.

At any rate, a valid translation must have some indication of a movement toward the next date rather than away from an earlier one. Although this may theoretically just indicate that it was carved or that the text was written before the date 9.16.0.0.0, that does not appear to be the case here. It may, however, also indicate a discursive future considering that the date 9.16.0.0.0 is the latest one on the Hieroglyphic Stairway and that it serves as the orientation point for the 9.15.16.7.17 date. It is this latter alternative that seems most likely this case.

In this passage, then, the distance number is positioned as a **forward-toward** or future count and functions as such without the presence of the *-o 'm* suffix. But this is what basically happens in most similar passages in which *-o 'm* is actually suffixed. This provides further evidence that the future indication comes from the context and the lack of a past temporal enclitic. Sometimes the verb that serves as the object of this trajectory is inflected for other purposes with a resultative in *-o 'm* and sometimes with other inflection or markers. Here it is indicated by a straightforward unmarked intransitive form with the root intransitive marker and a conjunctive discourse marker highlighting or

emphasizing the event. Passages such as this indicate that the difference between *i uhti* and *uhto'm* is not temporal but qualitative.

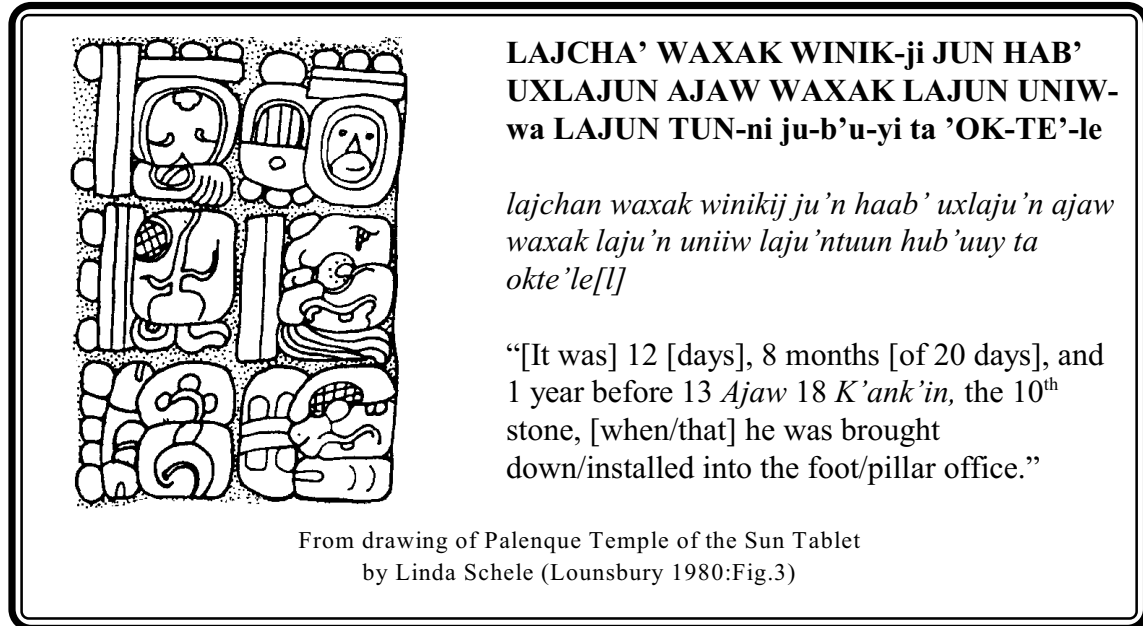


Figure 218. Distance number context with count toward later date but *uht* not present

5.2.4.3.2 Palenque Temple of the Sun Tablet

The passage in Figure 218 has already been included above in Section 5.2.3.1 as an example of how the *-ij* enclitic works on distance numbers. In a previous passage in this inscription, not shown here, the taking of the office of *okte'lel* by *Kan B'ahlam* of Palenque is tied in by a distance number to the taking of the same office by an earlier ruler. In the passage shown here, the distance number is intended to count forward towards the next half-score-years period-ending on 9.10.10.0.0. In addition, this distance number also provides the point in time before which the *okte'* event took place.¹⁹⁸ It is then followed by a restatement of *Kan B'ahlam*'s installation into the *okte'lel*. After being placed in time relative to the same event in the life of an earlier ruler and relative to

¹⁹⁸ Although it is not directly relevant here, a backwards calculation one might make leads to a date five days after 9.10.8.9.3, the date stated earlier as the one on which he was “inaugurated” *k'alwaan*. This seeming discrepancy is perhaps cleared up by the earlier passage stating “on 9 *Ak'bal* 6 *Xul* he was inaugurated(?) on his fifth *okte'* day (or “into his 5 *okte'* days”), *K'ihnich Kan B'ahlam*. . .”

his own birth, this important event is then placed temporally relative to the next appropriate higher-level time-period ending, in this case the completion of the upcoming “*laju’ntuun*” (or 10th 360-day *haab*’) period within the 20-score year count. The lack of the past temporal enclitic as well as the presence of the *-ij* enclitic indicate a count forward **toward** the next date rather than away from the last. But in other passages in which the non-past enclitic or no temporal enclitic occurs, such as Figure 212, the verb *uhto’m* is written before it. As noted, others have suggested that it is the verb or participle form *uhto’m* that carries the future indication. But as can be seen in this example from the Palenque Tablet of the Sun, the same future indication is present without *uhto’m*. What can be concluded from this and other similar examples is that it is not a verb with an *-o’m* suffix that indicates “future,” “time until,” or “time before,” but rather the distance number with either the non-past temporal enclitic or no enclitic at all.

The distance number provides the length of time before the completion of the half-*winikhaab*’ period-ending in which *Kan B’ahlam*’s designation as *okte’lel* occurred. Since the temporal standpoint of the narrator is the time of the *jub’uuy* event, the *laju’ntuun* ending is situated discursively in the future. To clarify exactly which event is being placed within this time-frame, the event itself is repeated with a different verb than earlier in the inscription: *jub’uuy ta okte’le(l)* “he was installed into the foot/pillar office(?)”. A different verb may be used here because a different ritual is performed at the end of the five-day *okte*’ ceremony than at the beginning. Important for the point being made here is that instead of a verb marked for the future, a non-past adverbial enclitic or the lack of any temporal enclitic attached to time-period nouns indicates a “time before” or “time until” relationship between two events.

5.2.4.4 Count Toward Later Date with *uhto’m* but No *-o’m* on Paired Verb

The next set of examples also represents passages in which forward-toward or future is indicated by the lack of enclitics or by the *-ij* enclitic on the distance-number time-period nouns. However, unlike the previous set, these passages also include the

verb form *uhto'm* between the distance number and the Calendar-Round date. What is most significant about them for the present purposes is that the Calendar-Round dates are then followed by verbs at the same point in the timeline as *uhto'm* but they do not take the *-o'm* suffix.

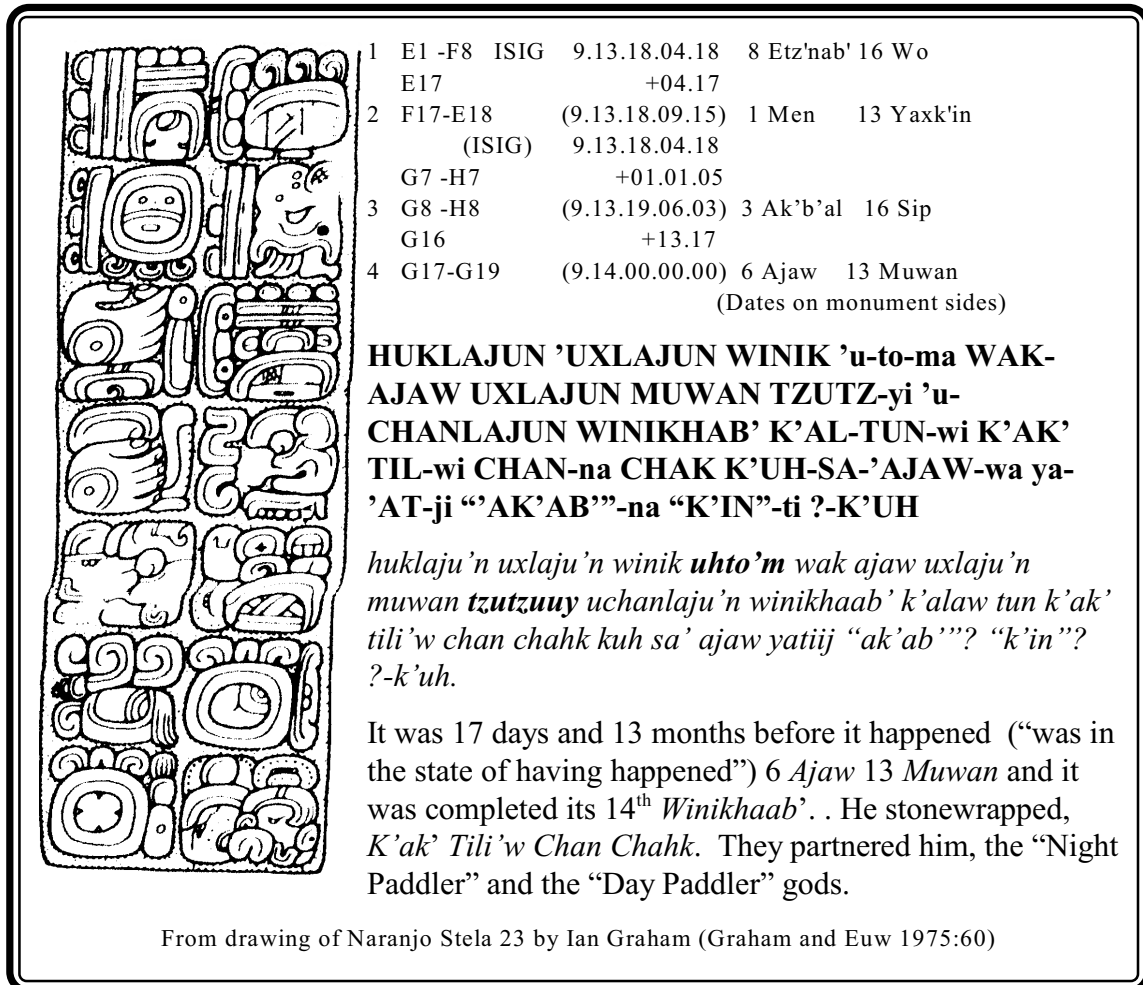


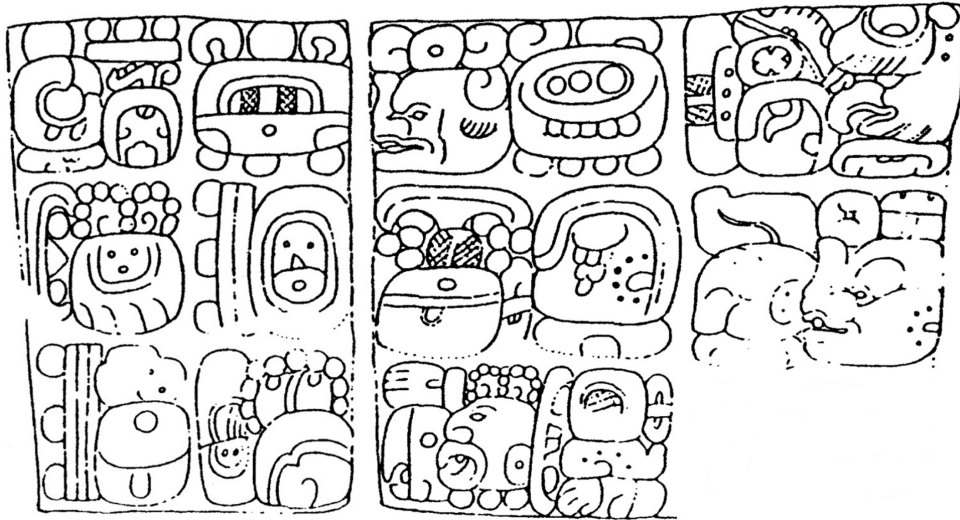
Figure 219. Two verbs at same point in timeline, one with *-o'm* suffix, other without

5.2.4.4.1 Naranjo Stela 23

It is the first two sentences in the partial inscription from Naranjo Stela 23 shown in Figure 219 that are the most important for the present argument. The verb *uht* follows the distance number and precedes the Calendar-Round date. It takes an *-o'm* suffix. The

next sentence follows the Calendar-Round date but precedes the period ending date. But although it is clearly part of the same overall event, the verb *tzutzuuy* here does not have *-o'm* suffixed although it is on the same point in the timeline as *uhto'm*. If the *-o'm* suffix actually indicated the future tense or a future participle, then surely the completion event would also have to be in the future. Otherwise, the abrupt shift in time frame from future to past or even present would be incongruous. The English mistranslation, ≠“It will be 17 days and 13 months before it will happen 6 *Ajaw* 13 *Muwan* and it is/was completed its 14th *Winikhaab'*. . . .” illustrates the problem. But if *uhto'm* is instead a resultative, then it would be emphasizing that the previous date does indeed stand in that temporal relationship to the current one. The scribe is attempting to ensure that the record of its calendrical placement is irreversibly and unmistakably placed relative to the completed time period. What is more, this time period is specified not only by the calendar round date 6 *Ajaw* 13 *Muwan*, which occurs every fifty-two 365-day years, but by that calendar-round date as it occurs with a specifically numbered period-ending, in this case the 14th *Winikhaab'* (*k'atuun*). The resultative would not be required on *tzutzuuy* since the scribe is viewing that sentence as further specification as to which 6 *Ajaw* 13 *Muwan* is meant. Here *tzutzuuy* is a mediopassive simply stating a fact, that is, that the 14th *Winikhaab'* was completed on that specific calendar-round date. As such, it fits well with *uhto'm* stating the particular calendar-round date would be “in a state of having happened.” In sum, this combination of affixes works well if *uhto'm* is a resultative form. It does not work well if it is really a future, because that would likely require future inflection on *tzutz* as well, and that is not present no matter how one interprets the *-o'm* suffix. So this example and others like it present evidence that *uhto'm* is neither a suffix for providing future tense inflection nor for deriving a future perfect participle.

The count is forward toward the Calendar-Round date, a temporal direction which is signaled by the lack of the past enclitic on the time-period nouns. The verb form *uhto'm*, interpreted by many as a future form, instead stresses that the period-ending date, 9.14.0.0.0 occurred or will have occurred precisely in the time period covered by the distance number. The resultative form itself does not assume or preclude a particular tense or time frame on its own but depends upon the given context. By using a resultative



Copán Altar Z

9.16.18.09.19

+01.08.01

9.17.00.00.00

**JUN 'e-na B'OLON wi-WINIK JUN-HAB' 'u-to-ma 'UXLAJUN 'AJAW
WAXAKLAJUN 'o-'OL 'i-T'AB-yi yu-xu-lu wa-ja-la 'u-[-?]-ki TUN-li ma-'a-to-
sa-ma 'u-pa-ta-b'u-ji YAX PAS CHAN-na YOP-'AT-ta xu-ku 'AJAW**

*Ju'n e'n? b'olon winik ju'n haab' uhto'm uxla ju'n ajaw waxaklaju'n o'hl i t'ab'aay
yuxul wajal u["altar"] tuunil ma' tosam upatb'uuj yax pas chan yopaat xuk ajaw*

It was 1 day, 8 months and 1 year before it occurred (was in the state of having occurred) 13 *Ajaw* 18 *O'hl* and when it got burnished/raised up(?) the carving of the altar stone of Ma' Tosam. He formed/did it (was in the state of having done/formed it) *Yax Pasaj Chan Yopaat* Copán Lord.

From drawing of Copán Altar Z by Barbara Fash (Schele and Looper 1996:137)

Figure 220. Count toward later date with *uhto'm* but no *-o'm* on paired verb

with its stative quality in this context, the author attempts to assure the reader that the temporal relationship is firmly established. Given the occurrence of the previous event, the time count toward the period-ending date is assured. Here the period ending is the 14th *winikhaab'* (*k'atuun*) in the 9th *pik* (*b'aktun*).

5.2.4.4.2 Copán Altar Z

Although not mentioned when examining the Naranjo Stela 23 passage, there was actually at least one more verb at the same point on the discursive timeline that did not carry the *-o'm* suffix, that was *k'alaw* (or perhaps *k'alaaw* because of the **wi** glyphic spelling). This passage from Copán Altar Z shown in Figure 220 has been selected because *uhto'm* occurs at the same point on the timeline as another verb that does not take the suffix *-o'm* and which is not directly involved in the temporal placement of the event. Important for the proposal being made here is that the verb *t'ab'aay* and the event it reports are clearly meant to be seen as occurring at precisely the same point in time. It is referring mediopassively to the burnishing or raising up of this very altar at the completion of the 17th *winikhaab'*. Since that seems to be the only possible interpretation, if *uhto'm* were inflected for the future or were a future participle, then the verb *t'ab'aay* should also be inflected for the future or be a future participial form. But it is not. It is instead a mediopassive form without the suffix *-o'm* and in Classic Ch'olan, mediopassives of this type can clearly take an *-o'm* suffix as *tzutzyo'm* and other examples attest.

Finally, if this point in the timeline were meant to be occurring in the future, then even the next verb *upath'uuj* might also call for a future form. Instead, it is clearly a transitive resultative form in *-VVj*, an exact parallel for the intransitive resultative in *-o'm*. In both cases, the resultative is used to stress an existing state that is the result of an action and the lasting consequences that pertain because of being in that state. Again this passage brings into clear relief the difficulty of maintaining a future interpretation of the

-o'm suffix in light of a detailed look at even a few of the examples of passages in which verbs with -o'm suffixes occur.

5.2.4.5 Suffix -o'm on Verbs in Non-distance-number Contexts

This next set of passages consists of examples of verbs other than *uht* on which the -o'm suffix occurs. These do not occur in the context of distance numbers as do most of the other examples that have been examined in this context up to now.

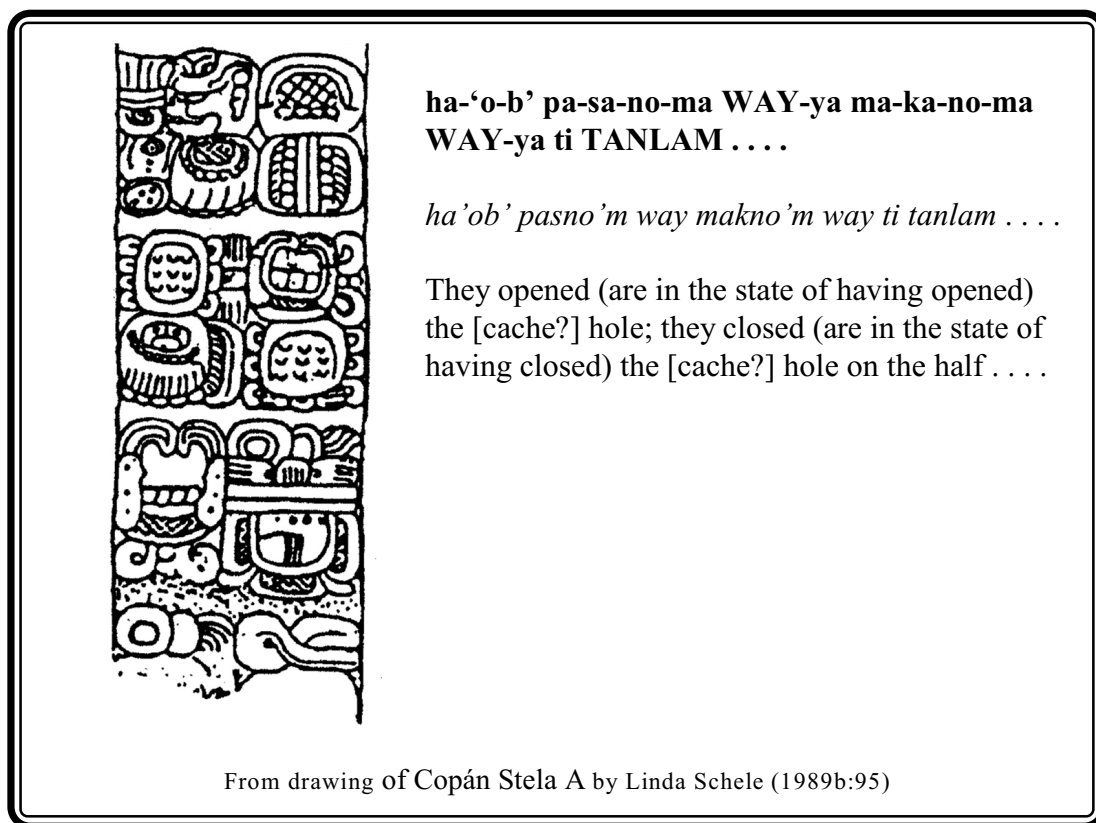


Figure 221. Passage including verbs suffixed by -o'm in non-distant-past context

5.2.4.5.1 Copán Stela A

One of the reasons for choosing the passage in Figure 221 as an example here is because it provides evidence for the use of -o'm in position somewhat removed, both physically and discursively, from a passage that does include an initial count-towards

distance number. It provides a good example of *-o'm* being used as a resultative in a non-future context. Why this is so must first be justified by examining a previous passage shown in Figure 222. That passage contains temporal information of the kind we have already been examining from other inscriptions. It starts with a reference ahead to the end of the 15th *winikhaab'* and places the current events within that time frame.

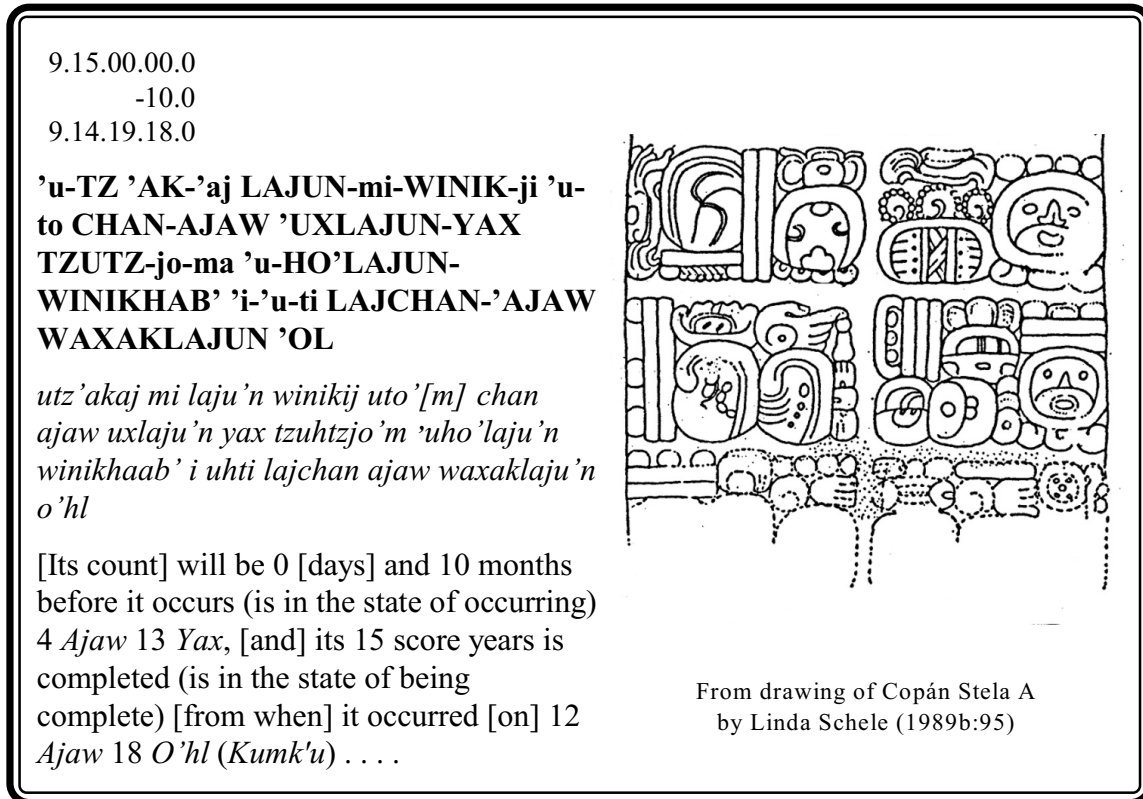


Figure 222. Date of earlier event explicitly tied into occurrence of period ending

The bottom portion of this same inscription on Copán Stela A is badly weathered and partially flaked off making the last row difficult to decipher.¹⁹⁹ However, the first two rows depicted here in Figure 222 are completely legible. Although more compactly stated than in other examples already examined here, the author is tying an earlier date

¹⁹⁹This flaking has caused the date 18 *O'hl* ("*Kumk'u*") in the first glyph block on the bottom row to be drawn as 13 instead of 18. However, on all photographs available including that from Maudslay (1889a:Pl.28) nothing remains of the date 18 *O'hl* below the second of what was undoubtedly originally three bars each indicating 5 days of the month.

into the date of a period ending.²⁰⁰ The count is forward toward the period-ending date and the two verbs with resultative inflection, *uhto 'm* and *tzutzjo 'm*.²⁰¹ To that degree, this passage is quite similar to the others as well. But these two verbs in *-o 'm* are not the central focus of this particular glance at Copán Stela A. What is different from most of the other examples is that the date which is the point of departure for the count-forward distance-number follows rather than precedes it not only in time but also in its position in the inscription.

The next verb after the period-ending date is *uhti*. It is the verb that introduces the long passage that follows. It is preceded by the conjunctive discourse marker *i* which often precedes important passages in longer inscriptions. What is highlighted is the occurrence of Calendar-Round date on which the following events took place. What is more, it is the same date as the long-count date 9.14.19.8.0 that begins the text and most likely reports the setting in place of this very same stela. What follows this calendar round date is likely the description of a ceremony that took place on that date involving the placement of a cache at the foot of this monument.

If it is true that the events are not in the future either extra-textually or discursively, there is really no need for a future tense in the context of this earlier date and the report of the events which follow. At any rate, the use of *i uhti* to report of the date of those events, clearly puts them out of any possible future context for those espousing *-o 'm* instead as future tense or future participial suffix. Despite this situation, there are verbs in that following passage from Copán Stela A that nevertheless do take the suffix *-o 'm* as shown in Figure 221. The question then is just what that suffix is doing in this context.

²⁰⁰ Although not common, the distance number here, including only the *winik* and *e 'w* ("day") periods respectively, must be read in the opposite of their usual order. However, as already noted in Section 5.2.3.3, the usual order is occasionally disregarded.

²⁰¹ Note that although the final **ma** syllable has not been written in the spelling of *uhto 'm*, it is likely that it was indeed the intended verb form. I suggest that the **ma** syllable was not written because of the phonetic influence of the following word *chan*. Similar to what happens when *itz 'iin* is followed by *winik*, the final *-m* was likely elided in pronouncing *uhto '[m] chan*. Not all scribes reflect these phonetic differences in spelling words, but some do.

The importance of the events on the day 12 *Ajaw* 18 *Ohl* have already been emphasized by being made the object of the long-count date at the beginning of the stela's inscription and also by explicitly tying them in temporally to the period ending. Beyond this, other syntactic measures were also taken to emphasize the importance of the people taking part in these events. Two of the specific measures will be mentioned here because they are of central importance to the present argument. One is to emphasize the nominal subjects by pulling them out of their positions (not shown in the figures here) following the verb in the sentence. Another is to pull out the pronominal subject as well by using an independent pronoun in place of the 3rd person ergative dependent pronoun (shown in Figure 221). Although the dependent pronoun is a prefix and is therefore always attached to the verb, the independent pronoun is a separate word. The application of these syntactic strategies provides the prerequisites and, to a certain degree, the requirements for using a focus antipassive construction. In Classic Ch'olan, this type of construction requires that the verb be intransitive, specifically, an intransitive that has been derived from a transitive stem as an antipassive.

The other measure of special interest here is that of emphasizing the lasting quality that remains because of participation in a particular exceptional activity. As already explained in detail the discussion above, the use of resultative inflection is one important way to emphasize the state inhering in those subjects as a result an action. In this passage from Copán Stela A, the two verbs that occur, *pas* “open” and *mak* “close,” are both transitive roots. Since they are both transitives, why not simply use the suffix for transitive resultatives, *-VVj* to accomplish the purpose? This was not possible because of the author's decision to pull out both the nominal and pronominal subjects and to have them precede the verb. That brings us back to the requirement to use a focus antipassive in precisely such contexts. The focus antipassive suffix *-an* derives an intransitive stem. Finally, an intransitive stem calls for intransitive resultative inflection. In the case of these two verbs, *pas* and *mak*, the antipassive is formed by the derivational suffix *-an*,

resulting in *pasan* “he/she/they opened” and *makán* “he/she/they closed.”²⁰² When the resultative inflection is added, the vowel of the antipassive derivational suffix is elided and the final forms are *pasno’m* and *makno’m* as seen in this passage.

As is often the case, sentences containing these constructions are headed by an independent pronoun representing the nominal subject. In this case, the nominal subjects are likely representatives of the rulers from Copán, Tikal, Calakmul, and Palenque (not shown in the two figures here). These nominal subjects are all referred back to by the 3rd person plural independent pronoun *ha’ob’* which immediately precedes the first of the two verbs. It takes the place of the Set A ergative dependent pronouns which otherwise would always precede them as attachments.

There does not seem to be any pertinent evidence here that the event is being described as occurring in the future. Instead, the conjunction and verb combination *i uhti* that begins this whole passage provides information concerning an event that took place on the same day as that recorded for the introductory long count date. The reference is to a ritual that took place ten-score days (10 *winik*) before the period ending of 9.15.0.0.0 at Copán. So the evidence points toward the conclusion that the inscription serves as a record of what actually occurred before the erection of this very stela. The erection itself may have taken place on or near the date of 9.15.0.0.0 4 *Ajaw* 13 *Yax* (August 16, A.D. 731). At any rate, there is no evidence that this passage reports on an event that will supposedly take place at some time in the future. There is certainly no evidence at all that the events are being reported in the discursive future. Instead, the way the event is reported in context after mentioning the future occurrence of the period-ending date emphasizes that these events preceded the period ending which was, in turn, the likely occasion for erecting the monument.

²⁰²In the Classic-Period texts, there is no distinction between the 3rd person ergative or absolutive dependent pronouns for singular or plural. That distinction is made only for the independent pronouns.

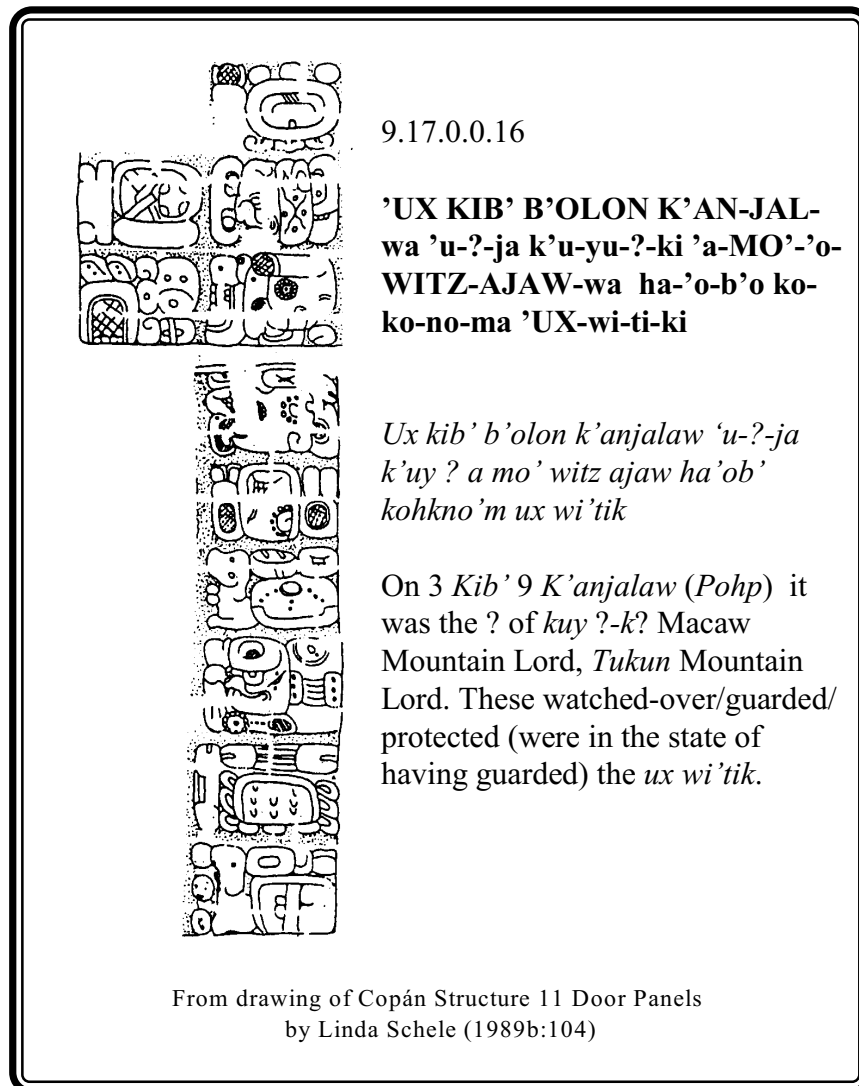


Figure 223. Passage including antipassive verb suffixed by *-o'm* in non-distant-past context

5.2.4.5.2 Copán Structure 11

In several important ways, this passage in Figure 223 resembles the one just presented from Copán Stela A. Instead of a verb, it opens with what is likely a possessed nominal formed from a verb root by the suffix *-aj* (see Section 4.5.2 above).²⁰³ Because the logogram itself has not yet been securely deciphered, it is unclear as to just what the

²⁰³The interpretation of this same verb and verb form as it appears in the Dresden Codex was suggested to me as a possibility by Alfonso Lacadena (pers. com. 1998).

word itself means.²⁰⁴ For the purposes of the present argument, what is important is that it carries no *-o'm* suffix nor any other suffix considered to be future tense or a future perfect participle. The date here, 9.17.0.0.16 is also by no means the latest in the inscription and there is no other indication that this is a reference to a future event. The passage preceding this one but not shown here also does not contain any verbs with an *-o'm* suffix and its final sentence is led off by *i uhti*. In fact, with this inscription, there seem to be even fewer questions one could easily raise about the timeline and the possibility of a future connotation.

Just as in the passage from Copán Stela A, the resultative in *-o'm* is used in an antipassive construction in the second part of this passage in Figure 223: *ha'ob kohkno'm ux wi'tik*. It uses the likely or grammatical possessors of the previous verbless sentence as the fronted nominal subjects. The verb root here is *kohk* which in Ch'orti' (Wisdom 1950:494; Pérez Martinez 1996:99) means “to wait for, watch over, guard, protect.” It is attested in the Ch'orti' sources in several contexts such as *kohko uchor* “guard one's milpa,” *kohko uyar* “care for one's child,” *kohko e tekpan* “care for the church.” The two Lords mentioned in the previous sentence, the Macaw Mountain Lord and the *Tukun* Mountain Lord are the two referred to by the independent pronoun *ha'ob* “they” as the fronted subjects of the second sentence.

There is otherwise no overt indication of a future connotation, so that interpretation would have to come solely from a presumption about the nature of the *-o'm* suffix and not from anything present here in this passage. I argue that it is instead the resultative form being used here to emphasize that these Lords are or were “in the state of protecting the *ux wi'tik*.” Although there is still some doubt as to the basic meaning of *wi'tik*, many epigraphers accept it as a place name, perhaps for the great plaza, at Copán (cf. Stuart and Houston 1994:23).²⁰⁵ *Kohk* is a transitive root in Ch'orti' and yet the form here is intransitive. In fact, it is an antipassive as demanded by the focus construction.

²⁰⁴ **PEK** has been suggested by Erik Boot (pers. com.),

²⁰⁵ *Wi'tik* itself could have the meaning “roots,” a combination of *wi'* meaning “root” and the group plural form *-tik* an alternative form of the plural *-tak*, attested, for example, in Tzotzil (Haviland 1988:86).

That is why the form is the intransitive resultative *kohkno 'm* rather than a putative transitive resultative *kohkooj*.

The context also indicates that it is not simply an agentive construction in *-o 'm*. Besides the correlation with the fronted independent pronoun common with focus-antipassive constructions is the additional fact that an agentive using this transitive verb could be formed by simply appending instead the *-o 'm* nominalizer without first deriving it as an antipassive. Such constructions in Tzotzil in Colonial Tzotzil were discussed in detail above in Sections 4.5.2.2 and 5.1.4.

5.2.5 Concluding Note on *-o 'm* Resultative Suffix Usage in Classic Period

Because the purpose of examining passages with verbs suffixed by *-o 'm* was to argue for a resultative rather than a future interpretation, only passing reference was made to the nature of the stems to which it has been suffixed. In fact, in the passages that have been reviewed, *-o 'm* is suffixed to root intransitives, including quasi root intransitives such as *uht*, antipassives such as *makan*, mediopassives such as *tzutzuuy*, and passives such as *tzuhztaj*. They all can take the suffix *-o 'm* when forming resultatives as these examples show.

In the passive form of the resultatives, one can see a difference between the language of the Classic inscriptions and Colonial Tzotzil. Colonial Tzotzil forms the passive resultative from a transitive root by using the suffix *-b 'il*, a combination of the passive in *-b '* and the nominalizer *-il*. This form is still used as a resultative in Modern Tzotzil and Tzeltal. It is also used in other contexts as a passive participle or gerund. In Ch'orti', which does not have resultative inflection, it still serves as a nominalizer for transitive verbs. However, ***-b 'il* is not used in Classic Ch'olan as a resultative suffix**, and indeed, there are so far no securely identified examples of it being used in Classic Ch'olan as a passive nominalizer. Instead, *-o 'm* is used as resultative inflection on all types of intransitive verbs including passives.

6 Temporal Discourse Marking in Classic-Period Narrative

6.1 Previous Approaches to Temporal Indicators in Classic-Period Texts

Epigraphers have long noticed the temporal progression of dates in many Maya hieroglyphic texts. Over a half-century ago, a functional system of anterior and posterior event markings signaling earlier and later dates was uncovered. But disagreement is still widespread as to the linguistic equivalents of these indicators and how they are to be read. What has been called the posterior event indicator (“PEI”) and its likely morphemic identification will be briefly discussed here from a historical perspective. Following that discussion, attention will move on to the second member of this set of discursive temporal indicators. This section will be mainly focused upon what had been called the “anterior event indicator” and referred to by the abbreviation “AEI.”

This investigation will turn to the *Paxbolon-Maldonado Papers*, a set of documents written in colonial Acalan Chontal, to provide clues to the linguistic function and analysis of the phenomenon partially encompassed by the “anterior event indicator.” It offers further descriptions and examples of what proves to be a temporal deictic enclitic attached to verbs in both bodies of texts. The comparison reveals overwhelming similarity in form, function, and usage. What was earlier analyzed as a hieroglyphic indicator, proves to be an integral part of both the Acalan Chontal and Classic-Ch’olan languages. Rather than a simple marker, it is actually a vital and flexible narrative tool. It serves several important roles within the discourse patterns of each body of texts, clarifying temporal relationships among various discourse internal and external events. The comparison of its behavior in both languages helps to elucidate the character of especially the past temporal enclitic which, among other purposes, serves to signal the temporal direction of back references and can be translated in context in various ways including “in-the-past, earlier, after, ago, later,” and more. Most important for this study is that, in the end, it exemplifies the approach to time taken in the Classic Ch’olan

language of the monumental texts and identifies the nature and grammatical functions of one of its most commonly occurring morphemes.

Earlier, in the previous section, it was necessary to introduce the temporal enclitics *-ijj* and *-ijjiy* ∞ *-iiy* in order to clarify the role played by the resultative aspect suffix *-o'm* on intransitive verbs in the Ch'olan of the Classic-Period monumental texts. As noted, some epigraphers and linguists attributed to *-o'm* the sense of future that actually comes from a combination of distance numbers and the “in-the-future” or non-past enclitic, or lack of any enclitic, on the time-period nouns. As was demonstrated, some distance-number passages employing *uhto'm* have the “anterior” or past enclitic *-ijjiy* ∞ *-iiy* attached to the time-period nouns making a future interpretation of the following *o'm*-suffixed verb quite unlikely if not ungrammatical. That introduction to how those temporal enclitics function provided a hint of their importance for the expression of temporal relationships in the Classic Ch'olan texts. However, as an introduction, it provided only a glimpse into all the ways these enclitics function in Classic Chontal. It also failed to provide any indication as to how these enclitics have been interpreted and identified in the past. A brief summary of some of these interpretations will be provided next.

6.1.1 Earlier Approaches to Temporal Indicators

Although they did not recognize the temporal enclitics as individual glyphic or linguistic entities, some early epigraphers such as Goodman (1897:113-118) and Förstemann (1904a, 1904b:578-580, 1904c:586-587) noted that certain dates in the Classic-Period inscriptions are separated by specific intervals, that the dates often proceed in a straight line usually from earliest to latest, but also that earlier dates can either precede or follow later ones. They were able to do this mainly as a result of studying Maya codices and Colonial sources such as the *Chilam B'alam* documents and the *Relación de las Cosas de Yucatan* of Diego de Landa, which was discovered around the middle of the 19th century. They and others then began to apply this knowledge to the

dates on the monumental inscriptions. They did not, however, relate any of the patterns they found to the temporal enclitics.

Almost a half-century later Thompson (1943; 1950:162-163) identified two different glyph blocks, shown in Figure 224. One of them, Figure 224a, accompanied earlier dates and the other, Figure 224b, later dates. “These glyphs indicate by means of their affixes whether the date with which they are associated is the earlier or later of the two dates connected by a distance number” (Thompson 1950:162). For him, these glyph blocks had two different main signs, one resembling a sign for the

day *muluk* and another a “head” variant which depicted a fish (cf. also Thompson 1944; 2001). He viewed the fish-head sign as depicting a shark or *xok* in Yukatek and Poqomchi’. Besides meaning “shark” in Yukatek, Thompson (1950:163) also found the meaning “count” and concluded “There seems not the slightest doubt that the picture of the *xoc*’s head is used here to represent the noun and verb *xoc*, “count” or “to count””

Figure 224a, then, is an example of Thompson’s “backward count” glyph and Figure 224b his “forward count” glyph. He named them the “anterior and posterior date indicators,” or ADI and PDI, respectively. They were distinguished one from the other by the presence of a specific postfixed T126 glyph, on the ADI, and a prefixed T679 glyph, on the PDI. Thompson did err in the decipherment of the **XOK** sign and his close interpretation of the other signs was only partially correct. However, although his interpretation of the “count to the future” and “count into the past” on numbers in Kekchi and Poqomchi’ has the two reversed, he did sense that there was something similar to that

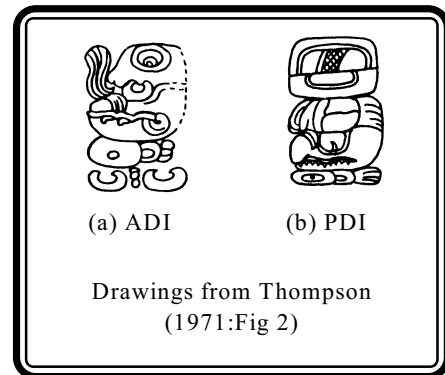


Figure 224. Glyph collocations designated the ADI and PDI by J. Eric S. Thompson

present in these glyphs.²⁰⁶ He also interpreted correctly how these two glyph blocks usually functioned at least in the most straightforward examples.

Most important for our purposes here are two points. First, by using a straightforward interpretation involving the relationship in time between two events, Thompson was able to map out or predict the use of one or the other of these two forms. Second, Thompson argued that these two glyph blocks were based upon a word that was likely a verb although he noted it could also be a noun. That he was wrong about its etymology and meaning was not as important at the time as his insight into the nature of its function in relating two events to each other rather than indicating whether the events were present or past in relation to the moment of writing.

6.1.2 Isolating the AEI and PEI

After it became clear from analysis by Tatiana Proskouriakoff (1960; 1961), Heinrich Berlin (1958; 1959), and others that the inscriptions went beyond recording dates, Lounsbury (1974:17) pointed out that this postfix and prefix could be

attached to many signs other than those mentioned by Thompson under the acronyms ADI and PDI. These included signs that had already been identified as indicating “birth,” “accession,” and “death,” among other events. So these affixes were not limited to “event words” that meant “to count” or even to words with meanings similar to them. Also, if they were indeed words indicating an event and if indeed the glyphic script represented a real language, they, or at least some of them, would very likely be verbs. Knorozov (1967:81-105) had indeed already deciphered some verbs written syllabically including

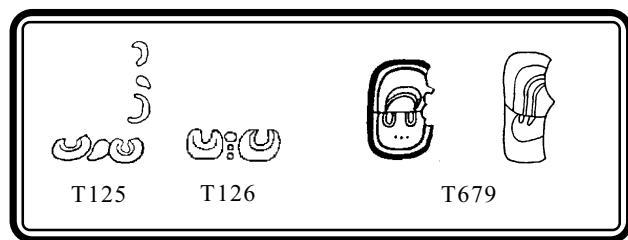


Figure 225. Examples of glyphs referred to as AEI (T125, T126) and PEI (T679)

²⁰⁶ “Thus we find *er* added to numbers in Kekchi and Poqomchi to denote a count into the future; *eh* to indicate a count into the past in these same languages” (Thompson 1950:163).

recognizable suffixes. So whatever these affixes were, they were likely capable of appearing at least on a substantial number of verbs in a real language. Following Thompson's and Lounsbury's lead, Schele (1982:22) called these affixes, shown in Figure 225, the **"anterior event indicator" (AEI)** and the **"posterior event indicator" (PEI)**. Glyphs reporting earlier events were often prefixed by T126, the AEI, and those reporting later events by T679, the PEI.²⁰⁷ This provided a more accurate way to refer to these specific functions since they were clearly not limited to verbs referring to counts or times. Although these interpretations belonged to an arguably prelinguistic stage of decipherment, they were all very important in furthering the knowledge of how these constructions functioned on "event glyphs," that is, on verbs in the Classic Ch'olan script. David Stuart's (1984, cf. also 1991)²⁰⁸ decipherment of Thompson's "count" verb as instead the verb *ut* (*uht*), "to happen, occur," brought the discussion up to the level of language. His decipherment finally made it clear that these two affixes did not have to combine with a "count" verb or even a number or time-period noun to function. That, however, still left the AEI and PEI glyphs to be linguistically determined.

The AEI and PEI designations worked well as a general approach to understanding the gist of the texts in general, but were too mechanical in application and linguistically unsatisfactory. Even more important is that, in many passages, the verbs do not include either of the two signs in question and yet the temporal progression or regression still occurs based upon the dates that accompany them. The PEI, recognized already by Thompson as Landa's sign for **'i**, precedes only a fraction of the verbs that are not suffixed by the AEI, which has been deciphered much more recently by David Stuart (1987:32) as glyphic **ya**.²⁰⁹ Although there are many more event glyphs with **ya**

²⁰⁷ Although Thompson distinguished between the T125 and T126, Alfonso Lacadena (pers. com. and also Lacadena (1995:105-106) notes that "the differences between T125 and T126 are only of time, the first being older than the latter, not of reading." He also notes that T47 and T133 belong to this same group and are all to be read as **ya**. For reasons of brevity, this whole group will be referred to as "T126."

²⁰⁸ The decipherment of this verb was made by David Stuart and circulated in a paper dated 11/1984 (see Stuart 1991 for a published version).

²⁰⁹ I believe this decipherment of T126 was first suggested by David Stuart (1987:32).

postfixes, the AEI is still not universally present in anterior event contexts. This leaves the majority of the verbs outside the scope of the traditional interpretations. An adequate linguistic explanation of these affixes would have to account both for why they do not have to be present in some cases and also for why the AEI and PEI can function independently of each other.

It is also incorrect to assume that these two signs T679 ‘i and T126 **ya** serve only the purpose encompassed by the AEI-PEI proposal. For example, the relative positions of other events in the narrative timeline would be misjudged if one mechanically took the presence of T126, **ya**, to be a “morphosyllable” to be interpreted as a sign of an

anterior event.²¹⁰ Some rather obvious examples of this problem can be seen in Figure 226 and serve as a simple reminder that it is, after all, a syllabic glyph that can be used in writing a part of any word or morpheme requiring it. Out of context, it might appear that each of these examples includes the AEI. However, in their original contexts, the **y** of the **ya** syllable is used here for the final consonant of the stem and the **a** as a vowel in the suffix. When used to write the enclitic, it can be transcribed as *-iiy* (or *-iy* if one does not

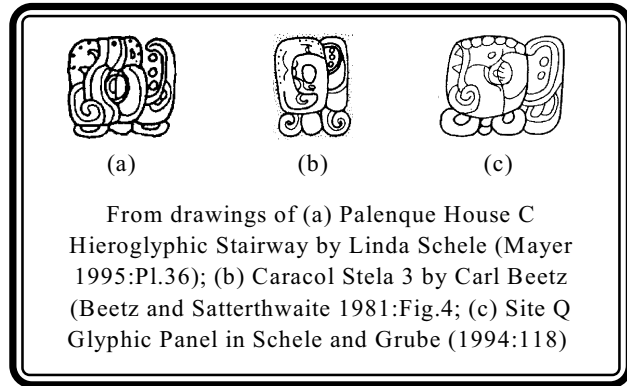


Figure 226. Examples of “birth verb” easily misread if T126 interpreted as morphemic sign for anterior event indicator.

²¹⁰“Narrative timeline” is here not the same as “event timeline.” The event timeline in the inscriptions is usually determined by explicit dates on which particular events occurred. It is, to a degree, separate from the narrative context in which the events are reported. The narrative timeline must always include the current standpoint of the author or reader within the sequence. That standpoint can change dramatically from clause to clause although the time of the event in focus might not. The events are analogous to raw material the author uses to create the narrative. Both the event time, the time at which the events are said to have occurred, and the discourse time, the changing standpoint of the narrator (and so the reader) within the recitation of the events, must be tracked to adequately account for the choice of temporal indicators.

ascribe to the view that the vowel of the syllable provides information about the character of the previous vowel).²¹¹

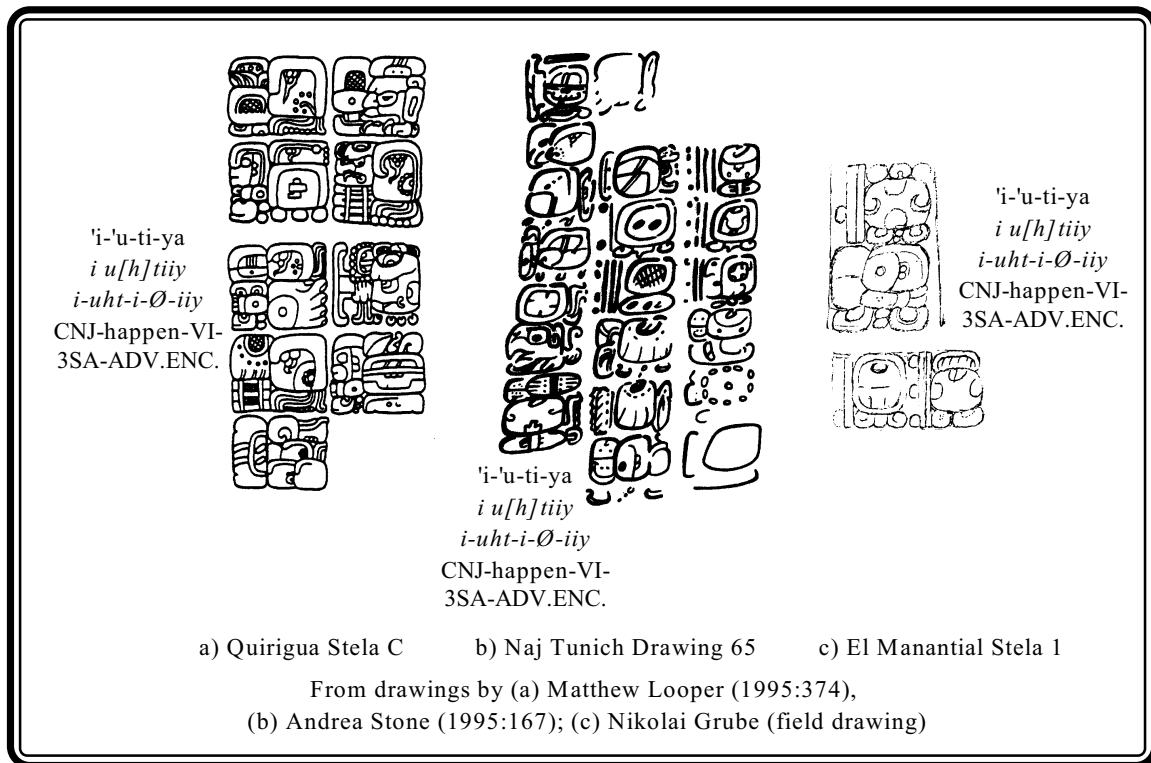


Figure 227. Examples of verb *uht* with both T679 ‘i and T126 *ya* affixes, apparently marking verb as both posterior and anterior event

Even more problematic for the AEI-PEI approach are a number of passages in which the posterior event indicator ‘i (T679) occurs on verbs that are suffixed by the anterior event indicator *ya* (T126). A few of these occurring with *uht* “happen” are shown in Figure 227. Although not common, an adequate linguistic analysis should accommodate these co-occurrences which seem impossible to explain within the traditional AEI-PEI approach. How could a specific event tied to one specific occurrence

²¹¹ As discussed in Section 2.2.10, it is not necessary to classify T126 *ya* as both a syllabic glyph and a “morphosyllable” to justify its use in writing a particular morpheme. As do all syllabic glyphs, it writes a particular series of phones or sounds which may be used in various ways as a part of a morpheme, an individual morpheme, or parts of two morphemes.

of a verb be both posterior and anterior at the same time? When added to the other noted anomalies created by the AEI-PEI structure, it becomes more likely that this analysis is based upon a few symptoms that are actually concomitants of a more broadly based syntactical system. Its limitations as a structural analytical tool underscore problems that can arise when one has to deal with written texts as a code to crack rather than as an organic written language capable of allowing complex grammatical structures and using a variety of narrative styles.

6.1.3 Beyond the PEI: *i* Versus *ival*

Most epigraphers now offer linguistically-based explanations for the presence of the two signs previously referred to by the AEI-PEI acronyms. Some time ago, Floyd Lounsbury (1974:17) proposed that one of them, the PEI (T679), since it was phonetic ‘i, may be writing the Ch’ol 3rd singular ergative dependent pronoun. This ‘i sign was later reinterpreted by J. Kathryn Josserand (1991:14). She proposed that the PEI wrote instead the predecessor of the Ch’ol conjunction *i*, which serves to highlight or draw attention to the event that follows it in the narrative. It is aspectually and temporally neutral, that is, it can be there when it serves the purposes of the narrative but may well be omitted without a change in verbal inflection. While certain aspectual or temporal patterns may tend to gravitate toward it, it is not part of the verbal structure nor does it serve as an auxiliary. While it is a conjunction on the level of sentence grammar, it can also be classified in these contexts on a higher functional level as what Schifffrin calls a “discourse marker.” Discourse markers “bracket units of talk” (Schifffrin 1987:37) and tend to operate “in discourse time” rather than event time just as *i* does here. Because *i* also emphasizes the discursive importance of the event it introduces, it is referred to more specifically by Josserand as a “focus marker.” The conjunction *i* is well documented as a discourse marker in Ch’ol and other Ch’olan languages where it functions in similar contexts and in

much the same way as in the Classic inscriptions.²¹² Although the Ch’ol conjunction *i* is sometimes misinterpreted as Spanish *y*, Josserand (1991:14) notes that “in contrast to Spanish *y*, Chol *i* is never used for concatenation of noun phrases, where only Chol *yik’ot* appears.”

The alternate reading *ival*, suggested by Justeson and Norman (n.d.), also has reflexes in Colonial and Modern Ch’olan languages. It occurs in Acalan Chontal as *yuual* and in Ch’olti’ as *yual* and *ival*. Its counterpart in Tumbalá Ch’ol is *woli* and in Ch’orti’, it is *war*. In Tumbalá Ch’ol *woli* (Warkentin and Scott 1980:33-34) and in Ch’olti’ *yual* (*ival*) (Morán 1935a:9), also serve as an indicators of the current present (“*presente actual*”) which is sometimes loosely equated with the progressive mood in English. For Ch’orti’, Pérez Martinez (1994:55-56) and Pérez Martinez et al. (1996:248) do not distinguish a “current present” from a progressive and call the construction with *war* the present progressive (“*presente progresivo*”). As Morán (1935a:9) notes, the “current present” indicates that something is happening “*actualmente*,” that is, “at this very moment.” As a result, the verb following *yuual* (or *ival*) in Ch’olti’ in such constructions is in what many linguists call the “incompletive.” If *ival* functions the same way in the Classic Period inscriptions, it would seem to favor a similar analysis. However, there are reasons to be very cautious about accepting these seemingly close meanings and usages as indicative of a diachronic development that has its origins in a present progressive usage that existed at the time of the Classic Ch’olan.

There are clear epigraphic problems connected with the decipherment of T679 as a logogram for **’IWAL** in the Classic inscriptions. One problem is its value in all other contexts where it serves as the syllable **’i**, although there are indeed other logograms that can sometimes serve as both logograms and syllabograms as noted earlier (see Section

²¹²Note that the argument of Justeson and Norman (n.d.) against the reading of T679a as **’i** seems to rest upon Lounsbury’s (1974:17) interpretation of it as related to the Ch’ol third person singular person marker, also *i*. Because Josserand makes no such connection, their historical linguistic arguments against the reading are irrelevant to her proposal. Although Josserand’s phonetic reading may be the same as Lounsbury’s some years earlier, and indeed the same as Antonio Chi’s, de Landa’s glyphic consultant, its linguistic basis and etymology are critically different.

2.2.8.5). Another is the dearth of clear phonetic complementation that might indicate a logographic rather than a syllabic decipherment as is true of some very standard logograms such as **'AJAW** (T168) or especially **TUN** (T28) which is most often syllabic **ku** when the **ni** complement is lacking. T169, however, is never preceded immediately by another **'i**, nor by **yi** or **yu**, and is never followed by an isolated **la** phonetic complement, which one might expect if it were always to be read as *awal* when prefixed to verbs. However, it does appear on Stela J at Copán as the first glyph in **'i-yu-wa-la** (as shown in Figure 228).²¹³ Linda Schele

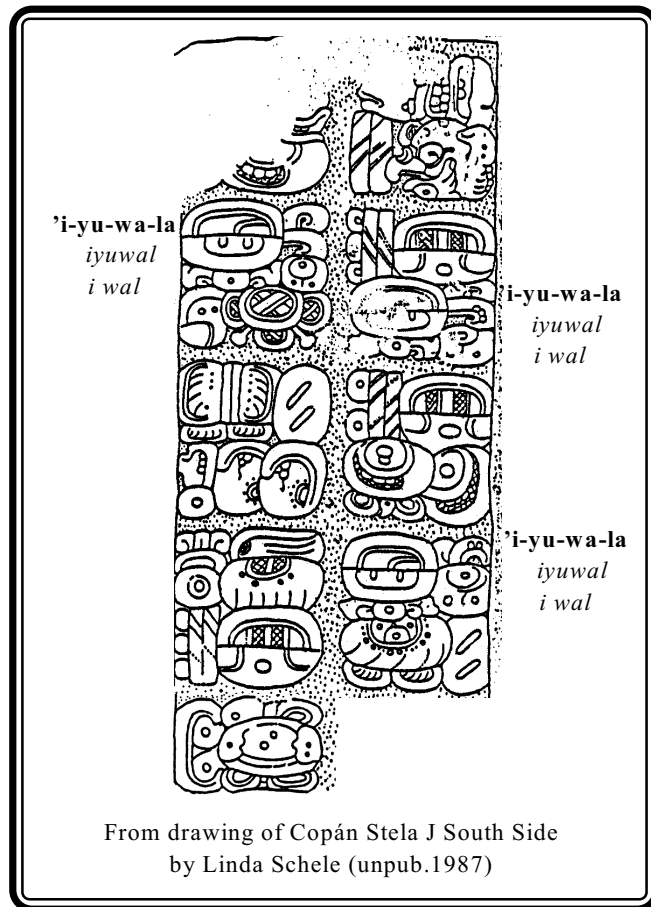


Figure 228. Three of several occurrences of *i wal* on Copán Stela J

(1991a:37) cited this as evidence of an **'IWAL** reading for T679 even when it occurred without the three following syllables elsewhere. However, the last three syllables of this collocation may simply be the words *i* and *wal*, that is, a Classic Period form of what later came to be *yuual*, *yuual*, *woli'*, *wāle*, and *war*. The *i* with which the compound on Copán

²¹³Since all Mayan words are accented on the last syllable, that accent is not marked when writing in Mayan. That accent will also not normally be marked here but can be presumed for all Mayan words. Because of Spanish orthography, many of the site names are marked and will be here as well.

Stela J begins, may be the discourse marker *i* functioning with *wal* just as it does with verbs.²¹⁴

It should be mentioned in passing that there is a more likely alternative. What is written **'i-yu-wa-la** may be the equivalent of *iwal* written syllabically with the syllable **yu** providing the equivalent of an audible glide between the /i/ and the /w/ without changing whatsoever the actual words being written, that is *i* and *wal*. In this case, it would indeed be *i wal* and would indeed be writing the two words which later also came to be written together in the Colonial Ch'olan languages as *yuual*, *yuual*, or *iwal*. However, just as in those languages, *i* alone could never substitute for the combination of the two lexemes in Classic Ch'olan.

Theoretically, one could interpret this glyph as **'IWAL** and still not subscribe to the pervasive presence of the incompletive.²¹⁵ Evidence for this conclusion comes from the *Paxbolon-Maldonado Papers*, an early Colonial Period document written in Acalan Chontal. *Yuual* in the Acalan Chontal document does not expressly signal the presence of the incompletive aspect, the “current present,” or the present progressive as its counterparts in Ch'ol, Ch'olti' and Ch'orti' sometimes do. When *yuual* precedes verbs in

²¹⁴ An alternative suggestion might be to view the word as *yuwal* with the logogram (T679) followed by its three-syllable phonetic complement. But this has not been suggested either by Justeson or Schele. While the **'i** decipherment for T679 will be used in this essay, there is a hypothetical problem posed by it. Schele (pers. com. 1997) notes when the person marker *u-* precedes a word beginning in a “vowel,” the form either changes to a semivowel or adds a semivowel between it and the first syllable in the word to which it is prefixed. There is no evidence of anything similar to that happening with *i* in the inscriptions. Since linguistic evidence indicates that the occurrence of an intervening semiconsonant is a factor of the spoken language, the next step would be to ascertain if *i* or similar words do indeed usually behave in a similar way in, for example, Ch'ol. While there is ample evidence of this behavior with person markers, it does not seem to carry over to other words. Since *i* in this usage is not a person marker, the importance of this objection is somewhat diminished.

²¹⁵ Establishing the **'i** decipherment for T679 is important because it removes one reason for expecting incompletive aspectual inflection on the accompanying verb. Although the concern here is not directly with the presence or absence of incompletive aspect in the inscriptions, one's interpretation of the PEI as signaling incompletive aspect, progressive mood, or present tense could have a direct bearing upon the interpretation of the AEI as completive aspect or past tense. It is this conclusion concerning the AEI that is of central importance here. This is true although Houston (1997:296) who argues for the widespread presence of the incompletive aspect or “historical incompletive” in the inscriptions at the same time rules out the **'IWAL** decipherment and does not conclude that it is being used to form the incompletive or the progressive in these contexts.

the incompletive in the Acalan Chontal document, it does sometimes have a meaning roughly equivalent to “now.” However, it often connotes the discursive rather than the temporal meaning of the word “now.” In such cases, it is usually translated as “*luego*” in Smailus’ literal translation but excluded from his freer rendition. It also precedes verbs inflected as completive and can function somewhat independently of any verbs. When it does act independently, it serves as a discourse marker with a meaning roughly equivalent to “then” or “and then” and is often included in Smailus’ free translation as “*luego*.”

In light of the data just presented and evaluated, we can return to the use of T679 in the Classic inscriptions and conclude that it is indeed the syllabic sign ’i which in these contexts writes the conjunction and discourse marker *i* and that it is not a logogram with the value ’IWAL. With this established, we will now turn to the AEI in an attempt to establish its character and how it interacts with verbs in Classic Ch’olan.

6.1.4 Beyond the AEI: Temporal Deictic Enclitic -ix

The decipherment of the AEI, the glyphic suffix T126 shown in Figure 225, is even more important than the decipherment of the PEI for the proposals that have been made as a result of the research undertaken for this study. According to Fox and Justeson (1984:60), William Norman proposed to them the decipherment **ix** for that glyph. This view was also promoted later by J. Kathryn Josserand (1991:15) and Nicholas Hopkins (1988b:10). The enclitic *-ix* occurs attached to verbs in Acalan Chontal, Ch’ol, Ch’olti’, and Ch’orti’, as well as in other languages not as closely related to that of the Classic-Period inscriptions. In many cases it corresponds generally to the meanings “already, ago, back then, then” in English. In Ch’ol, Ch’olti’, and Ch’orti’, it signals the occurrence of an event in the past or, relatively speaking, prior to another event or before the current time. As such, it would fit well in many of contexts in which T126 appears on verbs in the inscriptions.

There were, however, several major problems raised by the decipherment of this sign as **ix**. First, the phonetic syllable represented by the sign T126 does not seem to be

ix in other contexts throughout the inscriptions. Instead, in those other contexts, the value **ya** fits much better and seems, in fact, to be incontrovertible despite some possible alternate readings with **ix** that might also fit the general contexts (see Hopkins 1988b:10-12). Second, this decipherment of T126 as **ix** does not overcome one of the criticisms of its reading as an anterior event indicator (AEI). Since it would completely embody the *-ix* enclitic without using any additional syllables, attaching it to a verbal collocation almost forces admission of the clitic's presence. As such, it is susceptible to the same sporadic misinterpretation of the timeline that has been pointed out for the AEI theory. The verbs in Figure 226 and Figure 227 are also a problem for the **ix** decipherment since they would lead to an assumption of the *-ix* enclitic's presence where it is absent or would leave unexplained supposed actual anterior references. Still, this interpretation agrees with the one I have been making in this study in an important way. It finds the solution to the problem in a temporal deictic enclitic rather than in straightforward verbal inflection.

Linda Schele had at one time interpreted the “backgrounded verbs” as inflected for the pluperfect, an alternative that she first related to deciphering T126 as **ix** (Schele 1990:26). There are, in fact, grammars in some of the Ch’olan languages that make just such a connection. Warkentin and Scott (1980:41,72) suggest a “plusquamperfect” (past perfect) “tense” formed by attaching *-ix* to the root-transitive participle or to the root-intransitive “perfect” (incompletive) form in Ch’ol. A Ch’orti’ grammar by Vitalino Pérez Martinez (1994:67) describes a “completive perfect aspect” (“completivo perfecto”) for transitives also using the clitic *-ix* or *-i’x*. But in both these cases, one wonders whether these descriptions are not more dependent upon Latin grammar (through the medium of Spanish and English) than upon an independently developed analysis of how this temporal deictic enclitic functions in these languages. As such, it seems directed instead toward the question, “How might one best form the past perfect or best translate it into Ch’ol or Ch’orti’.” At any rate, it is likely that if these forms indeed represent grammaticalized verbal inflection, they developed as such in more recent times from verb-enclitic compounds.

Schele (1991a:37) abandoned the **ix** decipherment for T126 some time ago, but retained the interpretation of the verbs on the main timeline as perfective (completive) and those in the background as past perfect or pluperfect. In general, this tactic worked as a practical approach for arriving at appropriate translations, especially in cases where there is a direct referential connection from an earlier event to a later one. However, there are several problems with it from the perspective of the present investigation. First, while it offered a practical solution, it did not provide a rationale for the forms present in the texts. Second, a real problem arose when the past perfect did not work as a translation, that is, when the suffixing would seem to indicate the presence of the pluperfect but rendering the verb as such did not fit the context. These instances are not rare. The proposal offered in this study is intended to provide an alternate linguistic solution for what is occurring in these passages. These problems are not just those of translation but rather lie especially in the inappropriateness of the past-perfect concept in contexts where there is no immediate reference back to a previously reported event. Like the AEI concept itself, it provided a partial interpretation but was not adequate for a more complete understanding in all contexts.

6.1.5 Beyond the AEI: Completive-Aspect or Past-Tense Inflection

At about the same time that the interpretations just presented concerning T126 **ya** were being proposed and developed by others, David Stuart (1987:43) in a context related more to syllabic decipherment than grammatical analysis interpreted the suffix *-iy* as representing instead perfective inflection. There was little in-depth discussion of this proposal in print until the middle 1990's when Stephen Houston (1997), acknowledging discussions with Stuart and John Robertson, developed a more elaborate view that included interpreting verbs without the presence of T126 as representing the incompletive aspect. He concurred with Stuart by identifying the forms suffixed by T126 as exemplifying completive aspect while describing most of the rest as encompassing the "historical incompletive," analogous to the "historical present" in English. In the early

2000's, Robertson, Houston, and Stuart (Houston et al. 2000b; Robertson et al. 2004) changed their interpretation by concluding that instead, verbs with the T126 suffix represented the “past tense” while most of those without it exemplified the “present tense” inflection.

Discussing in detail these views is very important for the purposes of this present study and for justifying the views concerning the verb morphology of the Classic-Ch'olan inscriptions that are being presented here. This detailed discussion will be presented later in Section 7. However, it is critical at this point to first add more empirical depth to the examination of how this morpheme actually functions in a wide variety of contexts. This examination was begun in Section 5.2 but will now extend even further beyond the data already presented. The hope is that, with a wide variety of examples to use as background data, it will be easier to evaluate the strengths and weaknesses of the different approaches to the interpretation of this aspect of Classic Ch'olan verb morphology.

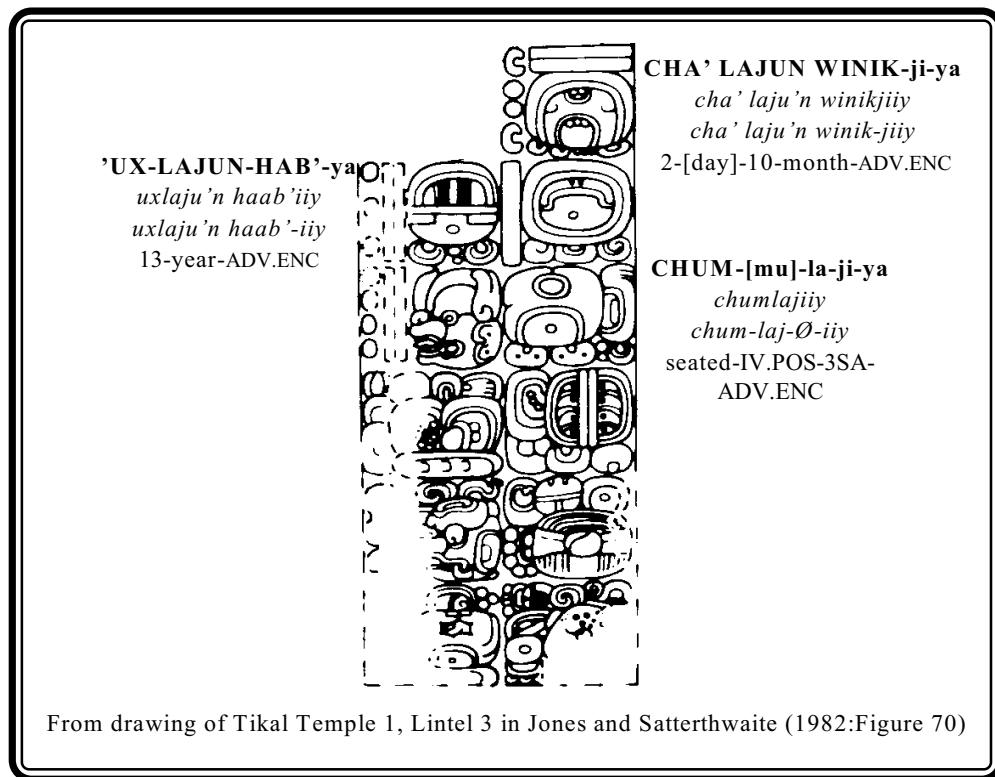


Figure 229. Example of temporal deictic enclitic *-ijiiy* ∞ *-iiy* used on both time-period nouns and verbs with same function and in same passage.

6.2 Setting Stage for Revised View of Temporal Indicators

6.2.1 Temporal Enclitics attached to verbs

Figure 229 shows a passage in which *-ijiiy* ∞ *-iiy* is attached both to verbs and to some of the time-period nouns in the distance number. There are literally hundreds of passages throughout the Classic Period monumental inscriptions like this one in this crucial way. The same count-away-from, anterior, back-referencing, past-time deictic-enclitic appears on numbers, time-period nouns, and verbs in similar passages with the quite the same function, effect, and basic meaning. We have already shown several other examples in the previous discussion of the so-called “Anterior Date” and “Posterior Date Indicators” (ADI and PEI) in Section 6.1 and earlier in the discussion of the *-o'm* suffix in Section 5.2. The decipherment by Stuart of the ADI (see Figure 224 above) as based upon the verb stem *uht* has withstood the test of time and almost always has the enclitic *-iiy* (glyphic **ya**) attached in these contexts.²¹⁶ This particular passage here in Figure 229 illustrates the nouns **WINIK-ji-ya** *winikjiiy* and **HAB'-ya** *haab'iiy*, as well as a verb, *chumlaajiiy*, all with *-ijiiy* ∞ *-iiy* attached. Stated loosely, the past enclitic on these three words signals that the time at which the reported event occurred was prior to, that is, was in the past in relationship to the one which follows, that of *Jasaw Chan Kawiil*'s being carried on a palanquin. Stated more accurately, in the context of distance numbers, such as here, it indicates that the count is away from the previous event, here *chumlaajiiy* “he was seated,” rather than toward the next event, that of being carried on a palanquin.

There is no doubt that the appearance of the *-ijiiy* ∞ *-iiy* enclitic on time-period nouns often corresponds directly with the appearance of the same enclitic on the verb in the same or in an adjacent sentence. If none is present on at least one of the adjacent verbs when it appears on a time-period noun, the reader can conclude that the event referred to is not repeated in the same passage. This co-occurrence of an attachment of the same shape on both verbs and time-period nouns in the same context in the same or

²¹⁶There is one passage in which the verb stem *uht* takes instead the longer form of the past-time deictic enclitic *-ijiiy* which will be illustrated and discussed later.

adjacent sentences serves at least as *prima facie* evidence that the morphemes involved are identical. Although there is some variation, that between *-ijiiy* and *-iiy*, the forms occurring on both sets of compounds, the verbs and the distance numbers, consist of these two basic allomorphs.²¹⁷ If indeed this preliminary hypothesis based upon contextual and formal evidence is borne out by further detailed examination, the question will have to be addressed as to what type of attachment or affix can be used with each class of morphemes.

Although it would be highly unlikely, or perhaps better put, would be the sign of a grammatical misanalysis, for the same inflectional suffix to appear on verbs, adverbs, adjectives, and nouns, it would quite normal for clitics to attach to different word classes. Kaufman and Norman (1984:94) have the following to say about their nature:

Clitics are morphemes that cannot appear as independent words in discourse but must be attached to some other word. Unlike affixes, clitics are not properly part of the inflectional paradigm of the word to which they attach. In many cases, clitics can be attached to more than one word type (while affixes are normally attached to words of a single type). In Chol, the morpheme *-ix* ‘already’ is an enclitic: it occurs with verbs, nouns, adjectives, and particles.

Sections 5.2.2 and 5.2.3 have provided a view of how the enclitics *-ijj* and *-ijiiy* ∞ *-iiy* function in context on numbers and time-period nouns both in Classic Ch’olan and in the Colonial and Modern Ch’olan languages. In doing so, they have been analyzed from the standpoint of both their phonetic structures and their discourse functions. This approach will also be followed here in examining the use of the enclitic on verbs. Since one of the main arguments for the identity of this enclitic on adjectives, nouns, and verbs lies in the character or qualities of its actual use in context, viewing extant examples first

²¹⁷There is also another form *-jiiy* which occurs quite often as well. Indeed, it occurs in the Figure 229 example. However, instead of an allomorph, it should be considered a phonetic variation of the longer form *-ijiiy*.

seems to be the best approach. Later, relevant grammatical and historical-linguistic arguments will be discussed along with an evaluation of opposing viewpoints.

6.2.2 Oldest Colonial Ch'olan Document Written by Native Speaker

Some time ago (Wald 1998a; 1998b; 2000a), I proposed that reflexes of the enclitic *-ijiiy* ∞ *-iiy* were attached to verbs in both Classic Ch'olan and Acalan Chontal. If correct, this analysis provides evidence from a Colonial-Period document written in a language closely related to that of the Classic-Period texts. Justifying that interpretation necessitates the presentation of detailed arguments for its legitimacy. The initial and most important thrust of the argument consists of an extensive analysis of this enclitic's use in discourse patterns exhibited both in the Classic Period inscriptions and in the *Paxbolon-Maldonado Papers*. These papers are also known as the "Acalan Chontal document." They originate from an area between the Pedro Martir and Candelaria rivers which was given the name "Acalan" by the Central Mexicans. The name "Chontal" for the language also comes from them. The portion of the papers that will be quoted here were written in the Ch'olan language by native Chontal speakers from that area (cf. Scholes and Roys 1968:51-52).

The review of the data from this source must be extensive because the focus of the analysis is a deictic enclitic otherwise not yet recognized as having been used on verbs at all in Proto-Ch'olan. Even its function in the Acalan Chontal document must be elucidated since its identity there has not been recognized either. Because the ramifications of this interpretation are so far-reaching for the interpretation of verb morphology in the Classic inscriptions, the amount of in-depth detail and analysis allocated to it here seems justified.

The material gathered in the Acalan Chontal document came from the offices of Don Pablo Paxbolon, the cacique and governor of Acalan Tixchel from 1566 to at least 1614 (Scholes and Roys 1968:299). The actual text was likely written by a few different authors over an extended period and even included the translation from Nahuatl into

Chontal of some oral testimony probably recorded in Acalan around the middle of the 15th century. However, the various parts of the main text of the final version were translated, copied, and written in Acalan Chontal in Tixchel by clerks under the authority of Pablo Paxbolon during the years of A.D. 1610 to 1612 (Scholes and Roys 1968:361). A Spanish translation intended to be sent to Spain was made in 1612. All of these versions were then copied again in 1614 (Scholes and Roys 293-294). It seems that the Chontal text along with the Spanish translation was sent to Madrid only through an error that left the Spanish only copy behind (Scholes and Roys 1968:360).

Multiple authorship is much more indicative of the Classic-Period inscriptions than of the Acalan Chontal document, but, as with all languages, the communicative purpose is only served to the extent that the texts are written in a format that can be shared with the target audience. Despite differences in the audiences and in the texts, it has proved fruitful to study even the Classic inscriptions as a body of literature about which one can draw certain general conclusions about both form and meaning. Still, multiple authorship over an extended period does lead to variation.

It is important to note that in both bodies of texts, we are encountering *parole* and not *langue*. There is variation, especially orthographical variation, in both bodies of texts. This is even true of the *Paxbolon-Maldonado Papers* although only a few authors and copyists were involved. The text, although not particularly short considering the paucity of early colonial documents written by native speakers, represents a minuscule amount in comparison to the already large and still growing corpus of Classic-Period inscriptions. It is important to find a middle path that will allow for *parole*-based variation in writing while still recognizing the differences that are significant at the level of *langue*.

6.2.3 Importance of Context for Morphological Analysis

The basic form of this enclitic, a bound morpheme, is similar in both the *Paxbolon-Maldonado Papers* and the Classic-Period texts. In Acalan Chontal it is an

enclitic with two basic allomorphs, *-ihi* (*-ij-i*) and *-i*. In the Classic Ch'olan of the hieroglyphic inscriptions, it has two similar allomorphs, *-ijiiy* (*-ij-iiy*) and *-iiy*.²¹⁸ In the case of the former allomorph, a phonetically influenced variant *-jiiy* also occurs. These same two forms have already been discussed as they occur on numbers and time-period nouns in both Classic Ch'olan and in the Colonial and Modern Ch'olan languages. The orthographical features of these two forms when attached to verbs will be discussed in more detail later. But it is more important to first establish the functional similarity of this enclitic in these two related languages. After all, it is its function in context rather than merely its similarity in form that is crucial for demonstrating its historical identity.

There are several morphemes in both Acalan Chontal and in Classic Ch'olan operating side-by-side which are similar or even identical in form but are not the same morpheme at all. Although similarity or homogeneity of form is an important factor for identification, one of the most convincing ways of distinguishing homophones and homographs from homonyms is by studying their use in context. That is another reason for first presenting the behavior of this lexical morpheme in discourse context. Later, we will return again to the historical linguistic basis for arguing the identity of the morpheme in each body of texts and in the Ch'olan languages in general.

6.2.4 Comparing Function of Adverbial Enclitic *-ijiiy* ∞ *-iiy* to Verbal Taxis

Although it is very important to demonstrate the similarity in the way the Classic Period past-time enclitic functions in Acalan Chontal in order to identify it as an adverbial enclitic, it is also important to review these same examples to determine whether it might be an inflectional suffix rather than an enclitic when it appears on verbs. As already mentioned, it has been proposed by Stephen Houston, John Robertson, and David Stuart at various times (Houston 1997; Stuart et al. 1999a; 1999b; Houston et al. 2000b; Robertson et al. 2004), that the short form of this enclitic is to be interpreted as completive aspect inflection or past tense inflection when it appears on verbs. While

²¹⁸Or *-ijiiy* ∞ *-iy* if one opts against long vowels in Classic Ch'olan..

additional grammatical and historical-linguistic arguments will be made later against both of these viewpoints, addressing this issue will also serve as a subplot in this contextual review. In order to gain further insight into the differences among aspect, tense, and taxis as well as to introduce an overall treatment of time in verbal categories, a few straightforward descriptions offered by Jurij S. Maslov (1988:64) should prove very informative. He states:

Aspect, tense, and taxis are all grammatical categories of the verb (and of predicates in general), and they all have to do with the idea of time, which, however, is regarded from different view-points in each of these categories.

Because they all have something to do with time, does not make the differences irrelevant or unimportant. Instead, it is precisely these differences that form the basis for each of these grammatical categories which can be present in the verbal system of a language. Maslov (1988:64) continues:

Aspect “assesses” or characterizes the denoted “action” (event, process, situation, state etc.) as it progresses or as it is distributed in time, but irrespective of the moment of speech or, as it were, of the time of another action, mentioned or implied.

Stated in another way, aspect pertains to how an event takes place or proceeds in time but not to how it relates temporally to the specific point of discourse whether in speech or writing. It also does not relate the specific event to the time at which another event occurs. So a good example of an aspectual distinction would be between incomplete and complete as in the modern Ch’olan languages. A verb marked for the incomplete aspect would characterize the action as ongoing or not yet complete but would not specifically answer the question concerning whether the reference is to the

present, past, or future. Only if one wished to translate the text into a language in which present, past, and future distinctions were primary, or at least present as such, would that question have to be answered. And precisely because that question would have to be answered in the language with the tense system, the translation of the incomplete construction would only be approximate within that language. It would also have to vary depending upon other factors in both languages that might have a bearing upon the context of each specific passage. An example from English given by Maslov is “the opposition of the progressive (concrete-process aspect) to the non-progressive (simple or “general” aspect).” Since certain distinctions exist in one language and not the other, choices would always have to be made concerning meanings and connotations that do not exist in the other language in the same contexts.

Comparing tense to aspect, Maslov (1988:64) notes:

Tense is a deictic category, which localizes the “action” denoted by the predicate in time, that is, it establishes the relationship between the time of that “action” and the moment of speech (when the present, past and future tense forms are used in their principal and direct meanings, not figuratively).²¹⁹

This definition of tense is similar to that accepted by most linguists although there are sometimes disagreements about whether certain forms, such as the English future, is really a tense at all – partially because it is based on an auxiliary “will” or “shall” indicating desire or intent. This widely held view of tense is also the one taken theoretically by Robertson et al. (2004:260), and I have no basic disagreement with it. However, it must be emphasized that agreeing completely that tense is a deictic category and that the actual time it points to changes with the particular discursive moment is not

²¹⁹The word *deixis*, ultimately derived from the reconstructed Indo-European root **deik-* is based upon the Greek *deiknūnai*, “to show” but is also reflected by way of Latin in English words such as “digit,” “index,” and “indicate” which all imply pointing in some way or another (cf. *The American Heritage® Dictionary of the English Language*, Fourth Edition 2000). .

at all the same as agreeing that an adverbial enclitic such as *-ijiiy* ∞ *-iiy* is instead verbal tense inflection. Although both this enclitic and taxis or “relative tense” point temporally and so are involved with time, the temporal deictic enclitic in question often functions in ways not indicative of verbal tense either in the absolute or relative sense. This point will be discussed in much more detail later in Section 7.2.

Finally, concerning the category especially important for comparison here, Maslov (1988:64) states:

Taxis is a category which defines the “action” denoted by the predicate in terms of its relations with another “action”, named or implied in the given utterance, that is, the chronological relations between them (simultaneity, precedence or sequence), and also the opposition of the secondary “action” to the principal one (cf. the relation of the Russian *deeprīcastie gerund*’, i.e., verbal adverb, to the finite verb in the same sentence).

Stated differently, taxis relates actions to each other temporally, that is, in relation to the time at which they happen or happened.²²⁰ This is precisely the type of relationship that has been noticed between events in the Classic inscriptions and which led to the identification of what was earlier called the ADI (anterior date indicator) and the AEI (anterior event indicator). The category taxis is not concerned with relating an event temporally to the moment of expression in discourse whether it be in speech or writing but rather with relating two or more events temporally with each other. This is not what is usually meant by the category tense, at least not in its primary or absolute sense.²²¹

²²⁰ According to *The American Heritage Dictionary*, Fourth Edition (Pickett et al. 2000), the word “taxis” comes from the Greek *tassein* meaning arrangement, the root of which is *tag-* “arrange.” Although not mentioned by Maslov, “taxis” is used in the field of Biology to mean “The responsive movement of a free-moving organism or cell toward or away from an external stimulus, such as light.” Thus, its analogous use as a grammatical category by Maslov and others is quite appropriate.

²²¹ Taxis is closer to what Comrie (1985) calls “relative tense.” Comrie’s views will be discussed in more detail in Section 7.2.4.

Taxis is not a matter of present or past as is tense, but a matter of anterior or posterior. Although this relationship can and is also presented by means of verbal inflection in many languages, there are other means of conveying these relationships, one of the most common being through adverbs instead. Several examples have already been shown, and others will be, in which the enclitic *-ijiiy* ∞ *-iiy* is present only on nouns and not on verbs in specific passages and yet the same type of temporal relationship is discursively established between two events. These examples alone are sufficient to demonstrate that this enclitic can and does function categorically as an adverb because in those contexts no verbs are present at all to receive the supposed inflectional suffixes.

In the inscriptions, the concern is not only to relate events to each other temporally, but also often to specifically and precisely measure the exact length of that temporal difference, which is the reason for distance numbers in the first place. One could speak of the rulers and scribes being extremely interested in time, but it is more accurate to say that they are really interested in propagating the location in time at which all the events they consider most important took place, their temporal placement in relation to other events, and their position in relation to specific calendrical milestones. That is why, in their narratives, the scribes or their commissioners so often tie all of the related events to the next most convenient or most important terminus of time whether it be the end of the quarter score, half score, thirteenth year, score, score of scores, or, albeit rarely, even larger time frames.

It should be noted that although these categories are quite clear, concise, and easy to differentiate, actual examples of their implementation in verbal systems produce results that are not always as clear, pure, or unadulterated. In other words, whether implemented through adverbs, auxiliaries, particles, affixes, or other means, the resulting constructions sometimes contain an admixture of two or more of these three categories. It is up to the grammarian to analyze them and up to the comparative linguist and the translator to decide how closely they relate to constructions in other languages that perform similar functions in general and in specific instances. As noted by Maslov (1988:64):

In practical use aspect, tense, and taxis often interact in different hybrid, contaminated combinations. For instance, aspectual oppositions often have taxis functions (as in Russian). In other languages tense pairs up with taxis in the forms of so-called relative tenses (doubly oriented tenses, like the pluperfect or future in the past).

The pluperfect example is especially relevant for English and Spanish speakers since both languages do have a pluperfect, also called a “past perfect.” Since the pluperfect combines both taxis and tense, it is easy to see why epigraphers at times equated the use of the *-ijiiy* ∞ *-iiy* enclitic with the pluperfect. In many cases, especially when distance numbers were involved, such a translation worked well. Of course, one also needed to add a temporal conjunction to arrive at clauses such as “**since** it had happened,” but that still seems reasonably close to what is meant in Classic Ch’olan. However, as we shall also see later, there are many cases in which equating this enclitic with the pluperfect does not work well at all. One example is in locative usages of *uht*, such as *uhtiiy lakam ha’* “it happened at big lake.” In this case, “it had happened at big lake” in English, for example, would mean something quite different from what was likely intended. Such an English sentence would assume a different context from a previous reference, for example, “I did not know it had happened at big lake (when I told him about it yesterday).” Contexts of this sort are never present in the Classic Ch’olan inscriptions in which locative statements such as this occur.

On the contrary, in locative sentences, the past tense seems to work quite well as in the English translation, “It happened at big lake.” This is probably part of the reason why some are willing to accept this temporal enclitic as past-tense inflection instead. However, as will be explained in more detail later, the English sentence employs the past tense (in the sense of Comrie’s “absolute tense”), whereas the original Classic Ch’olan enclitic simply provides discursive directional information concerning the referent of the pronoun. But even more important, the past interpretation does not work well in

distance-number contexts unless one adds adverbs such as “ago” or “since” and that consequence by itself provides a major clue to what purpose the temporal deictic enclitic *-ijiiy* ∞ *-iiy* serves and to what category it belongs. Also, the past tense construction does not account for the taxis portion of the Classic Ch’olan verb plus temporal-enclitic compound. So, even if one leaves aside for now previous historical-linguistic analysis which characteristically lacks the reconstruction of any Mayan language with a verb system based primarily upon tense, actual examples from the texts themselves, such as those already mentioned and those to come, provide practical evidence that the past tense is not a good analytical match for the verb system actually attested in Classic Period texts that include the *-ijiiy* ∞ *-iiy* enclitic.

However, it should also be noted that the problems caused by analyzing the temporal deictic enclitic as past tense in some contexts are not nearly as severe as those created by interpreting verbs without the enclitic as representing the present tense. That half of the picture will be examined later after establishing how the enclitic functions in Acalan Chontal and Classic Ch’olan.

6.3 Parallel Discourse Patterns in Classic Ch’olan and Acalan Chontal

6.3.1 General Reference to Previously-Reported Event

6.3.1.1 In Classic Ch’olan

In one of the most common discourse patterns in longer Classic-Period inscriptions, an event such as a birth, accession, or death is reported in a clause or sentence, usually accompanied by the date on which it occurred. It is then followed in a later sentence by a general reference to that already reported event using the verb *uht* “to happen” along with an attached temporal deictic enclitic. The form of the enclitic with this verb, as with other CVC intransitive verbs, is almost always the allomorph *-iiy*.

Figure 230 contains an example of this ubiquitous narrative format. Transcribed and translated, the relevant parts of the passage are:

cha' ak'b'al wak mol nahwaj unuk ukojaw (Ruler 2) *k'in ajaw ... utz'akaj mi*
[k'in] ho'laju'n winikjiy uhtiyy ipasaj(?) cha' ak'b'al ju'n kase'w ...

On two *Ak'b'al* six *Mol*, the surface of the headdress of Ruler 2, the Day/Sun Lord, was adorned ... Its count was zero days and fifteen months from when that happened, and then it opened (dawned?) two *Ak'b'al* one *Kase'w*²²²

In this discourse pattern, information about the elapsed time since the targeted event is given in a distance number. The immediate subject of the intransitive verb plus clitic *uhtiyy* is the otherwise attached absolutive (Set B) dependent pronoun. As always, the 3rd person absolutive is unmarked (-Ø) but still, by default, points to a referent.

In this frequently appearing pattern, the referent is usually an event mentioned in a previous sentence. Here the distance number separating the two calendar-round dates provides a count away from the time of the previous event. The enclitic *-ijiiy* ∞ *-iiy* that is attached to a time-period noun indicates that

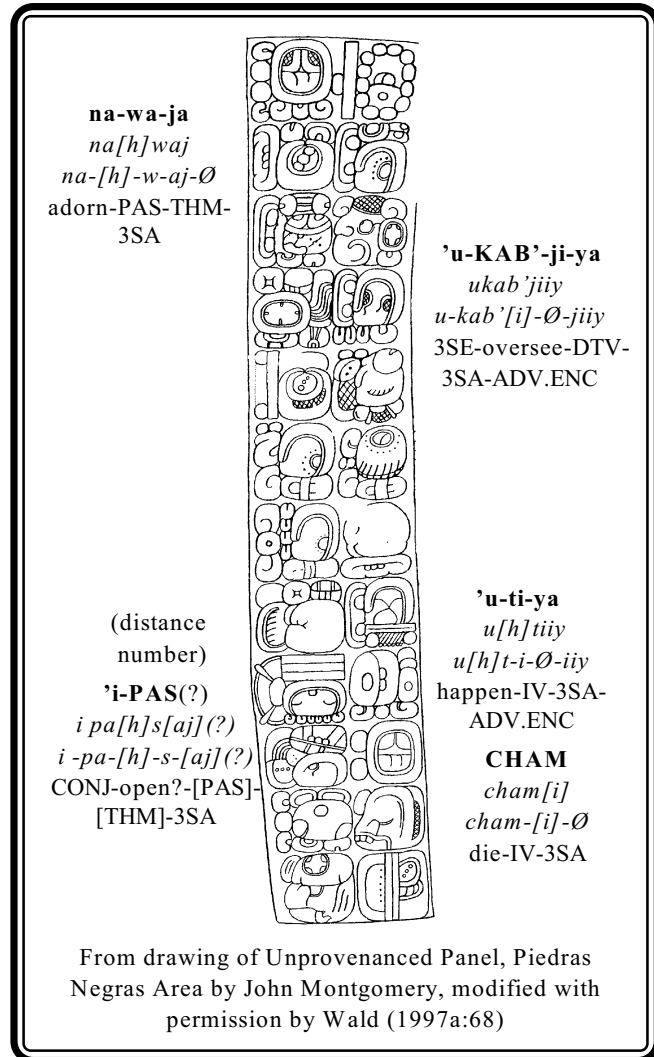


Figure 230. Temporal deictic clitic *-iiy* used in *uhtiyy* clause referring back to previous event.

²²²In this and other translations, the word “month” refers to a twenty-day *winik* (*winal*) period and “year” to the 360 day *haab'* (*tuun*) long-count period. The distance number of fifteen months suggests that the coefficient of *Ak'b'al* is three rather than two. Note also that “Its count was” for *utz'akaj* here is a guess based upon one of the meanings of the root. It may be a verb instead of a possessed derived noun.

the point of reference is in the past. The appearance of the deictic enclitic *-iiy* on the verb *uhtiiy* does not indicate completive aspect or past tense inflection. Instead, as a temporal enclitic operating as an adverb, it indicates the same thing as it does on the time-period noun, that the event referred to by the dependent pronoun occurred in the past in relation to the next event. Indeed, it is precisely the date of the event away from which the distance number is counting.

The person marker, the dependent pronoun, accomplishes the reference to the earlier event and the past deictic enclitic indicates the placement of that event as earlier in time. It reflects the relative temporal position of the event to which it refers. As in the following Acalan Chontal example, the *-iiy* enclitic attached to the verb functions not in a way similar to aspect or tense, but rather similar to taxis. However, instead of using verbal inflection to accomplish this, it is the adverb *-iiy* that provides the indication of the relative temporal relationship between the two events. Finally, as is often the case in the Classic Ch'olan inscriptions, the second verb or event of the pair, is immediately preceded by the conjunction *i* serving as a focus marker meaning “then” or “and then” and thereby introducing the event that is later in time (cf. Josserand 1991:14; 1997:127).

6.3.1.2 In Acalan Chontal

To the extent that a general reference is made to a previous event, the previous passage from the Classic inscriptions is similar to the *acathanihi* passages in the Acalan Chontal document, which will be examined in detail later. There is a critical difference, however. In context, the *acathanihi* sentences (equivalent to *akat'aniji* in the ALMG orthography) refer to a narrative event, that is, the previous **mentioning** of a person, place, or event in the text. The *uhtiiy* passage refers to an extranarrative event reported in the text but not directly to an actual initial report of that event. It is in the discourse-external event context that the distance number makes sense. But there are examples of another verb in the Acalan Chontal document which plays a role almost identical to that of *uhtiiy* in the Classic-Period inscriptions. That verb is *tal* “to come,” “to come about,”

and “to happen.” Here are two examples of the verb *tal* with the meaning “to come about, to happen” used with both the *-ihi* and the *-ix* enclitics.

***talihix** huli licenssia* (Paxbolon et al. 1614:**169.19**)²²³

After it happened (came about), the license [permission] arrived . . .

***talihix** uyubi Padre frai diego de bejar uthan unicobi – cahi uthanbel . . .*

(Paxbolon et al. 1614:**164.10-11**)

After it happened (came about) [that] Father Diego de Bejar heard the words of the people, he began his speaking . . .

The similarity of these two Acalan Chontal passages with those in Classic Ch’olan employing *uhtiiy* following a distance number is striking. Although there is no date or distance number present in the Chontal passages, a previous event serves as the reference point of the null absolutive pronoun in both languages. In the first Chontal example here (Paxbolon et al. 1614:169.19), the previous passage speaks about the person who obtained the permission for a journey to *Uzulhaban* to obtain the permission which then had to be brought to the people. It is that previous passage to which the verb *talihix* refers by means of its null absolutive pronoun. This is the pattern seen in the Classic Ch’olan passage with *uhtiiy* shown in Figure 230. In the second Chontal passage here (Paxbolon et al. 1614:164.10-11), the passage that serves as the dependent pronoun’s referent actually follows in discourse sequence the verb *talihix*. The referent of the absolutive pronoun is Diego de Bejar’s hearing the report of the people. From the previous passages we know that this pertained to the many people who had agreed to be baptized although the referent is not that event but rather Diego de Bejar’s hearing of the report. However,

²²³The page and line number of the passage in the original manuscript, here in bold, will be used for ease of reference.

the event itself is earlier and the Classic Ch'olan example shown in Figure 230 is very similar to this.

These Acalan Chontal examples using the verb *talihix* have both *-ihi* and *-ix* attached. They are both temporal deictic enclitics that have a similar meaning although they do not behave in the same way in Acalan Chontal. This behavior will be examined in more detail later along with other related linguistic and morphemic questions. For now it need only be noted that whether the temporal element (“ago, in the past”) is indicated by *-ix* alone, by *-ihi* ∞ *-i* alone or by both together, their usage and meaning is strikingly similar to the meaning and usage of *-jiiy* ∞ *-iiy* in the Classic-Ch'olan inscriptions.²²⁴

It is interesting to note that Smailus and Scholes and Roys do not explicitly translate *talihix* at all in those Chontal passages in which it behaves just like Classic Ch'olan *uhtiiy*. I believe that this is partly a result of their misinterpretation of just how the enclitic *-ihi* ∞ *-i* functions here.²²⁵ Smailus' characterization of it as a special suffix meaning “*lo referido*” “that referred to” rather than an enclitic indicating the **temporal direction** of that which is referred to, is likely at fault, since a verb with the meaning “to come about, to happen” does not make a reference in the same way as does a verb meaning “to say, mention.” It may be true that translating these verbs might not have been necessary for understanding the main action. However, a chance to appreciate one of the narrative styles used by the Chontal authors for connecting events in a sequence remained unnoticed. In the context of the current discussion, not translating these clauses at all and not translating similar clauses correctly, may have led epigraphers to overlook their similarity to parallel discourse patterns in many Classic-Period texts. I believe it also caused epigraphers to overlook the use of the enclitic *-ijiiy* ∞ *-iiy* on verbs in Classic Ch'olan as well.

It should be noted how clearly these passages demonstrate the importance of the adverbial enclitics' taxis-like performance in relating the first verb, *talihix* in each case, to

²²⁴ All the examples of this particular use of *tal* in the Acalan Chontal document have both *-ihi* and *-ix* appended, in other words, they end in *-ihix*).

²²⁵ That they were ignored even here where the more commonly recognized *-ix* enclitic was appended as well, is more surprising.

the main verb in the next sentence or clause. In each case, the combination *-ihi* and *-ix* enclitics are attached to the verb that references the earlier of two events, explicitly indicating its temporal relationship to the event in the next clause. Especially in the second passage (Paxbolon et al. 1614:164.10-11), this explicit sequencing helps to make clear that what the Priest said depended directly upon what he had heard.

Finally, it is very significant, that the two later events in each passage are nevertheless presented using a verb inflected for the Chontal completive aspect. This illustrates clearly that the use of the *-ihi* enclitic does not require that the later event be in the incomplete. Instead, in both of these cases, as well as in others in the Acalan Chontal document, the verbs representing the later events can be, and often are, inflected for the completive. This adds evidence to the argument that the difference supplied by the adverbial enclitic *-ijiiy* ∞ *-iiy* is similar to taxis and not to aspect or tense. For the most part, the Acalan Chontal document is a historical narrative. That the completive would occur in such cases is not surprising. However, it deserves emphasis here considering views that the verbs on the main timeline of the Classic Period historical texts are inflected for the incomplete (Houston 1997; Stuart et al. 1999b) or the present tense (Houston et al. 2000b, Robertson et al. 2004).

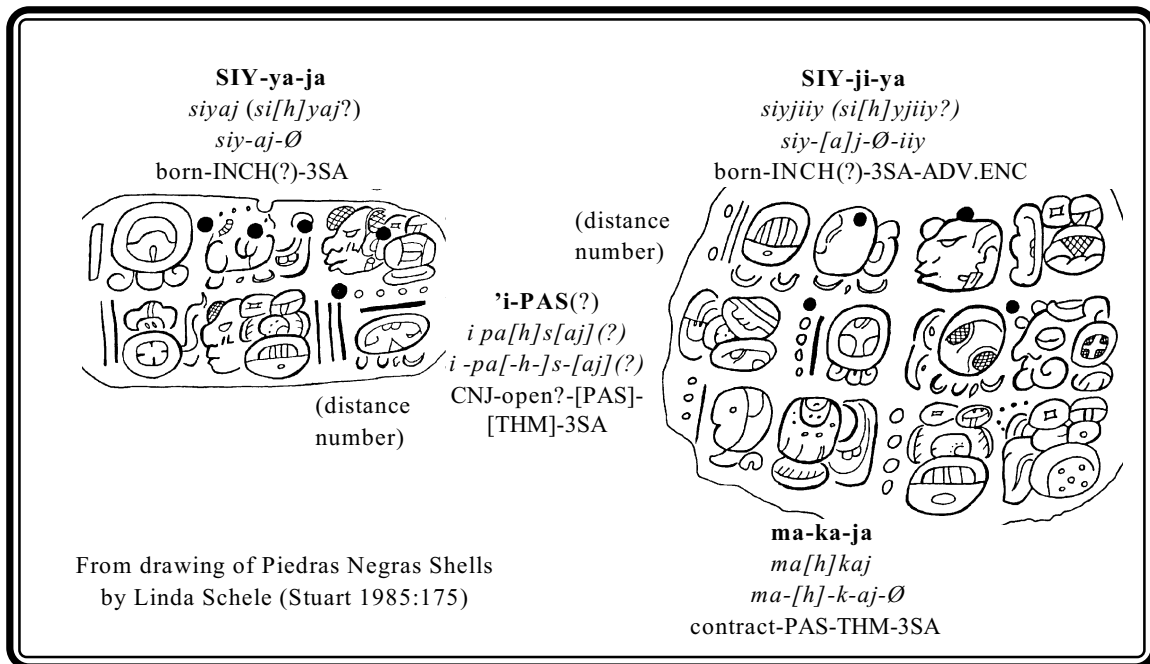


Figure 231. Relating later to earlier event by mentioning it again and attaching temporal deictic enclitic *-iiy* to verb

6.3.2 Specific Reference to Earlier Event

6.3.2.1 Verb and Dependent Pronoun Repeated without Nominal Subject

6.3.2.1.1 In Classic Ch'olan

Figure 231 and Figure 232 show another very common discourse pattern used by the Classic-Period scribes to refer back to a previous event while leading into the next. First an event is reported and then referred to in a later passage just as for a general back reference using only the verb-plus-enclitic *uhtiiy*. But rather than using a verb with a general meaning such as “happen,” these passages specifically identify the actual event again by using the same verb, this time accompanied by the deictic enclitic *-ijiiy* ∞ *-iiy* indicating the direction of the temporal distance between the later event and the earlier one. In both passages, this new event, the arrival of a particular date, is again preceded by the discourse marker *i* “and then” calling attention to it. Both are then followed by an

extra-calendrical event. Part of the passage in Figure 231 can be transcribed and translated as follows:

*ho' kib' chan laju'n yaxk'in siyaj ixik (na?) winikhaab' ajaw ixik (na?) man ajaw
ho'laju'n b'olon winikjiy lajchan hab'iiy siyjiy ipas(?) b'olon chuwe'n b'olon
uniiw mahkaj ixik (na?) naman ajaw ukab'jiy (Ruler 2) chan winikhaab' ajaw
k'uh(ul) yokib' ajaw.*

On 5 Kib' 14 Yaxk'in, Lady Twenty-Year Lord, Lady *Man* Lord was born. It was 15 [days] 9 months and 12 years after she was born and then it dawned 9 *Chuwe'n* 9 *Uniiw* [when] Lady *Naman* Lord was betrothed. He oversaw it, (Ruler 2) the 4-score years Lord, the holy "Piedras Negras" Lord.

Although the referenced event is reported in the immediately preceding passage, the scribe still repeats it specifically for the reader. Instead of employing a general verb such as *uhtiiy* to refer to the event from which the distance number counts forward, the scribe explicitly restates the same verb. So the previous passage is no longer needed to explicitly identify the action. But because the immediate subject of the current passage is a dependent pronoun, the reader still has to rely on the previous passage to ascertain the person's identity. The nominal subject of the first sentence is not repeated but is instead referred to only deictically and pronominally by the person marker. Although the second verb in Figure 231 is specific and does not depend syntactically or semantically upon that previous use of the same verb, the lack of a nominal subject might have caused confusion unless the grammatical subject were the same. For that reason, even sentences such as these would tend to follow immediately upon the original or very close by just as do those with a general verb. This would not necessarily be true of examples such as will be shown later in Figure 232.

6.3.2.1.2 In Acalan Chontal

Specific reference to an earlier event is also an occasion for the use of the temporal deictic enclitic *-ihi* ∞ *-i* in the *Paxbolon-Maldonado Papers* as this passage illustrates:

*hainix me ukal tazcinti fra Joseph Vozque yilan cab ya ochi chiuoha paçi
uzulhaban bayca **numon** yithocobi ya xach **numihi** holi tuyestançia francisco
maldonado* (Paxbolon et al. 1614:169.1-3)

This one then was sent, Fray Joseph Bosque, to see (for his seeing) the land, which he entered [at] *Chiwoha*. He proceeded by way of [at] *Uzulhaban* where **I passed by** with them. Then **after he passed by**, he left by way of (at) Francisco Maldonado's ranch.

Except for a few minor differences, this passage in Acalan Chontal is very similar to the two passages from Classic Ch'olan shown in Figure 231 and Figure 232. *Numihi*, translated here as “after he passed by,” plays the same role in the narrative as *siyajiiy* “after he was born” and *chamiiy* “after he died” in those two examples from the Classic-Period inscriptions. It also takes a form of the same adverbial temporal deictic enclitic *-ihi* ∞ *-i* (*-ijiiy* ∞ *-iiy*). The syntax of the Acalan Chontal passage is slightly more complex than them. It repeats the same verb, *num-*, twice, both times in the completive aspect but with the temporal deictic enclitic attached the second time. The subject of the verb also varies, being “I”, the narrator, in the first instance (*numon*) and “he” Fray Joseph Bosque (*numi[Ø]hi*) in the second. Fray Joseph Bosque is included with them (*yithocobi*) and that sets up the connection between the first occurrence of the verb and the second. The nominal referent of the dependent pronoun, Fray Joseph Bosque, is a few clauses back, at the beginning of the passage quoted here. Since there is no other intervening individual besides the narrator of the report, all of the 3rd person singular null absolutive pronouns clearly refer back to him.

For the present purposes of comparing how the temporal enclitic *-ihi* functions in both sets of texts, the final two clauses (Paxbolon et al. 1614:169.1-3) are the most important: *ya xach numihi holi tuyestança Francisco Maldonado* “Then **after he passed by**, he left by way of (at) Francisco Maldonado’s ranch.” Although there is no distance number present, there is clearly a temporal relationship set up between these two events, with the first being earlier and leading into the second. That is why this occurrence of the verb *numihi* has the temporal deictic enclitic attached and the previous one, *numon*, does not. Both are inflected for the completive and both of the events are on the same point in the discourse timeline.²²⁶ But only the second, *numihi* is being brought into a relationship with the next event on the timeline. That is why it calls for an indication of the direction of the temporal difference between it and the next event, or stated differently, for an indication of its position in relation to the next event. Again the similarity to taxis, and not to aspect or tense is evident in the temporal relationship between the two events. In this case, *-ihi* signals adverbially that *numi* “he passed by” is the earlier event and so *holi* must be the later one although both of the verbs are inflected for completive aspect and the latter one, *holi*, is not marked by an enclitic. This taxis pattern is the same as can be found in many of the Classic-Period inscriptions. However, in those Classic Ch’olan texts, there is no evidence at all of any completive or incompletive aspect marking or inflection as there is in the Acalan Chontal texts.

This example with the verb *num* is also important because it illustrates the use of an intransitive verb with the *-ihi* enclitic but without the enclitic *-ix* attached as well. The function of the verbs in these contexts is apparently the same in either case. Because the existence and interpretation of the *-ihi* ∞ *-i* enclitic in Acalan Chontal has, in the past, not been recognized at all by others, it is relevant to note that neither Smailus’ Spanish nor Scholes and Roys’ English caught the connotation indicated by the *-ihi* suffix on *numihi*. Smailus translates this same passage (from Paxbolon et al. 1614:169.1-3 as:

²²⁶In Chontal, the completive suffix *-i* is not marked on intransitive verbs in the 1st and 2nd person on which it is displaced by the absolutive dependent pronoun subject marker. It appears on 3rd person intransitive completives because the 3rd person dependent pronoun subject is itself unmarked.

Él entró (a la tierra de) Chivoha, pasó por Uzulhaban, donde habíamos **pasado** con ellos (los fugitivos cautivos), y **pasó** por la estancia de Francisco Maldonado. (Smailus 1975:107.7-9)

The Spanish of the original translation (not shown here) equates both *pas* and *num* with Spanish “pasar” while Smailus puts a question mark under his literal translation of “él se fue” (“he left”) for *holi*. In the freer translation given here, he conflates *numihi* and *holi* into “pasó,” and ignores the *-ihi* enclitic on *numihi*. Scholes and Roys do so as well:

He entered by Chiuoha, **passed** by way of Uzulhaban, and we with him, and from there he **came out** at the estancia of Francisco Maldonado. (Scholes and Roys 1968:404)

Instead, the literal translation I have suggested above, better represents the role that *numihi*, and especially the *-ihi* enclitic, plays in this sentence. It does not leave out any of the text nor does it conflate two verbs into one. Instead, it reproduces the syntax and discourse pattern that Acalan Chontal has preserved from Classic Ch’olan. The verb used for the earlier event is inflected for the completive aspect and has the enclitic attached. The event toward which it leads also has the completive aspect inflection but rightly lacks the enclitic. Except for the addition of the *-i* aspect markers and a slightly different vocabulary, this text could have been written by a Classic-Period scribe. At any rate, the discourse pattern is a close match to that encountered in the Classic-Period inscriptions.

It is also important to notice that, although *-ix* is not present with *-ihi* here, the *numihi* clause nevertheless retains its function as marking the earlier of two events. This indicates that the *-ihi* enclitic alone suffices in Acalan Chontal to indicate the direction of the temporal relationship between the two clauses. Since neither of these translators

seems to have noticed this particular syntax in these types of context, it may have also prevented others from recognizing the function of the *-ihi* suffix on verbs in Acalan Chontal. While the overall meaning of the passage is not altered drastically by this omission, the recognition of the discourse style and flow of the narrative is.

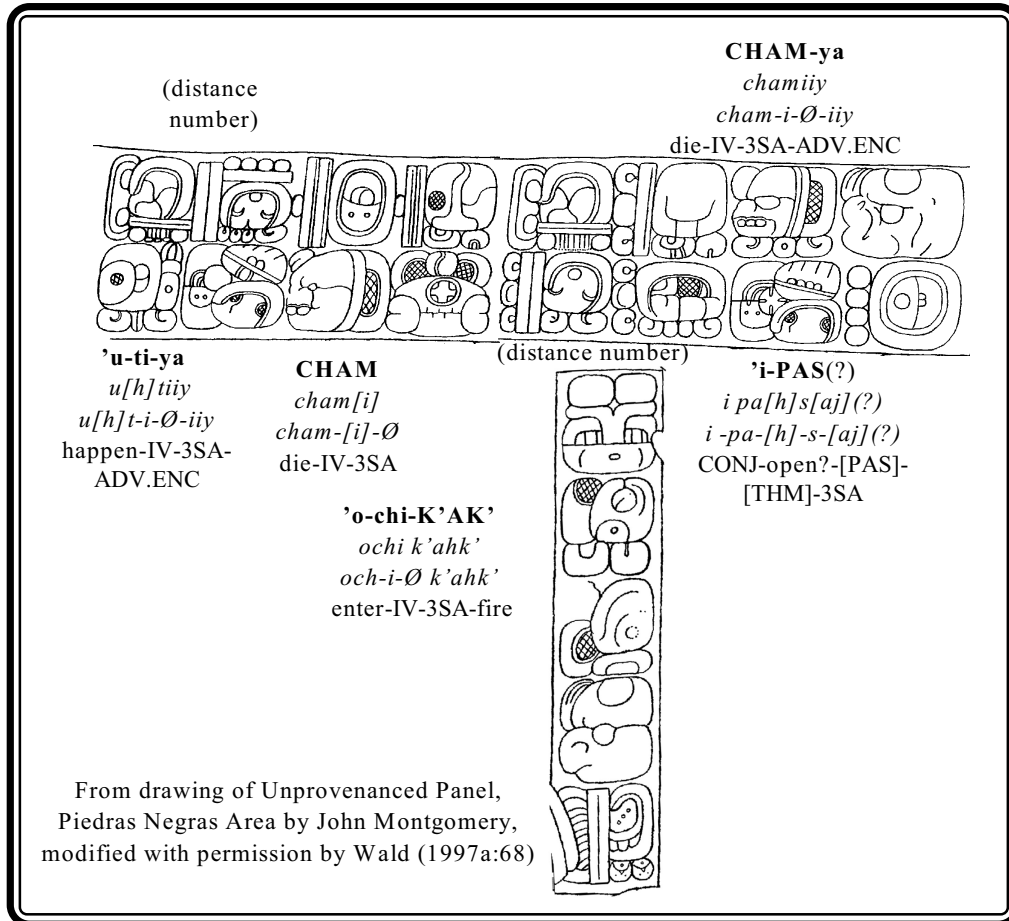


Figure 232. Temporal enclitic *-iiy* used with *cham* in clause referring to event reported earlier but not in immediately preceding sentence

6.3.2.2 Verb, Dependent Pronoun, and Nominal Subject Repeated

As with the previous two examples, Figure 232 illustrates the use in Classic Ch'olan of the past deictic enclitic *-iiy* on a verb (*cham*) to provide information concerning the direction of the temporal distance between two events, one mentioned in

the current sentence and another following it in the narrative. The relevant portion of the text is:

*utz'akaj wak k'in b'uluch winikiy ju'n haab'jiy chamiy k'an xok ipas chan mol
cha' pax ochi k'ahk' tu muknaal k'an xok sajal*

["Its count"] was 6 days, 11 months, and 1 year after *K'an Xok* died and then the day 4 *Mol 2 Pax* dawned/was opened and fire entered into the burial place of *K'an Xok* (Yellow Shark) the *Sajal*.

This passage appears at first to function in basically the same way as that in Figure 231. There is, however, a significant difference. Here, although the mentioned event was reported earlier, that previous report is not referred to at all syntactically because even the nominal referent is contained in the current sentence. Not only are the verb and dependent pronoun present, but the nominal subject, *K'an Xok*, is also included. If we look more closely at the whole text, the order of the reported events provides the likely reason for the explicit statement. Although this passage is immediately preceded by the report of a death, it is not the death of *K'an Xok* himself, but rather that of Ruler 2 of Piedras Negras. This determination is supported by the size of the distance number which counts not from Ruler 2's death but appropriately from *K'an Xok*'s own which is reported earlier in the text. The portion of the inscription that immediately precedes the one shown here in Figure 232 is shown above in Figure 230. So perhaps to avoid a possible misunderstanding as to whose death the current passage refers, the scribe repeats all of the necessary information. The deictic referent of the dependent pronoun is contained in the same sentence. The role of the temporal deictic enclitic *-ijiy* ∞ *-iiy* remains the same. It points back in time to the date away from which the count starts. It serves the purpose of indicating the direction of the relative temporal relationship between the two dates.

The same enclitic serves the same purpose on the verb. The written text is comparing temporally the first event, the death, to the second event, the entry into the

tomb. The *-iiy* enclitic on *chamiiy* explicitly indicates that it is the earlier of the two events in the passage. Although in a different system, one with temporal verbal inflection, tense inflection could indicate past on the death verb and present on the tomb entry, however only taxis could explicitly bind the two verbs in a temporal relationship. In the verbal system of Classic Ch'olan, this chore is performed instead in other ways, in this case by a dependent pronoun and an adverb. The two sentences or clauses relating the earlier event with the later one are thereby syntactically and referentially bound into a self-contained discourse unit.

Indeed, there was likely an extranarrative incentive for the scribe's having explicitly connected the two dates and events. The burial place of *K'an Xok's* tomb was being entered exactly 586 days after his death. Both the date of his death and the date of the re-entry into his tomb mark a heliacal rising of Venus as evening star (cf. Wald 1997a). By repeating completely the prior information and providing the distance number from the *sajal's* own death, the commissioner and the author emphasized the astronomical significance of both the day of the later entry into the tomb and the day of the *sajal's* death. In this way there would likely be less chance of the reader's overlooking the astronomical importance of this commemoration. At the same time, the *sajal's* death and the report of the tomb entry was interjected by a report of the death of the Piedras Negras ruler. That demonstrated the required obeisance to the ruler of that large polity by one of its outlying vassals while at the same time honoring one of its very own. Of course, at the same time, emphasizing the *sajal's* relationship with the ruler of the larger polity also enhanced the status of the local "governor."

6.3.2.3 Event Is Earlier in Time but Not Reported Elsewhere in Text

6.3.2.3.1 In Classic Ch'olan

This passage from Tikal Temple 1, Lintel 3, repeated here in Figure 233 (from Section 6.2.1), carries the discourse strategy exemplified in Figure 232 above to the next

level. However, taken out of context it seems little different from the one we just observed.

cha' [k'in], laju'n winikjiiy uxlaju'n haab'iiy ho' kib' chanlaju'n suutz'
chumlajiiy ti kalo'mte'le(l) jasaw chan k'awiil k'uh(ul) mutu'l ajaw i(?) kuchiiy(?)
nu b'ahlam chaahk

It was 2 days, 10 months and 13 years after 5 Kib' 14 Suutz' [when] he was seated in the *kalo'mte'*-ship, *Jasaw Chan K'awiil* holy Tikal lord, and then *Nuun B'ahlam Chaahknaal* was carried.

Just as in the Figure 232 example, the passage here stands on its own, with the specific verb, the dependent pronoun subject, and its nominal referent, *Jasaw Chan K'awiil*, included in the same sentence. The difference is that the event is not reported elsewhere in the same monumental text. The temporal deictic enclitic *-ijiiy* ∞ *-iiy*, however, plays basically the same role. Attached here to both the distance number and the verb *chumlajiiy*, it indicates that *Jasaw Chan K'awiil*'s seating into the office of *kalo'mte'* took place earlier than the event which follows, the carrying of the palanquin. While the distance number gives the exact amount of elapsed

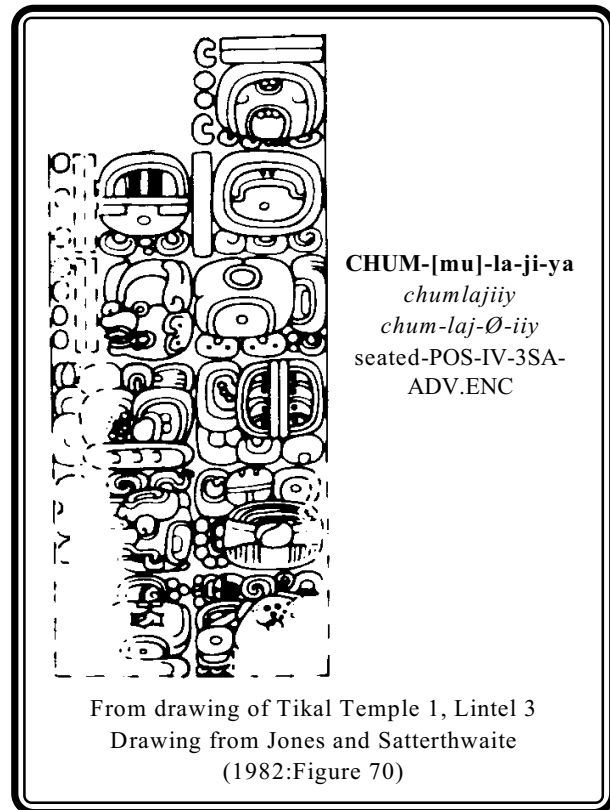


Figure 233. Temporal deictic enclitic *-ijiiy* ∞ *-iiy* relating earlier to later event without mentioning it elsewhere in text

calendrical time, the temporal deictic enclitic indicates that the *kalomte*’ seating took place in the past relative to it. The time difference here is between extratextual and not discourse-internal events because there is no preceding report. The seating is introduced in the background as if presumed by the author to be part of the audience’s knowledge base.

In the example included here in Figure 233, it may seem that strict “rules” of discourse patterning are violated because the event is introduced in the background. That is, the sentence mentioning the event for the first time serves mainly to add information concerning another event. Examples such as this make it even clearer than the passage in Figure 232 that this temporal deictic enclitic can be used even without intranarrative back references. Instead, it can also serve just as well to indicate a time difference between two extranarrative events. In this text, one of these two events, that being foregrounded here, has already been mentioned earlier. The other, the seating, is simply presumed by the author to be part of the audience’s knowledge base.²²⁷ In effect, the usual discourse patterns (cf. DuBois 1987:811) have indeed been followed after all. The new information is the temporal distance between the two events. Examples such as these again emphasize that the role of the enclitic *-ijiiy* ∞ *-iiy* on verbs is similar to that of verbal taxis, that of providing information concerning the temporal relationship between two events.

6.3.2.3.2 In Acalan Chontal

Earlier, in Section 6.3.1.2, two examples of the Acalan Chontal verbal compound *talihix* with the verb root used in the sense of “to come about, happen” were presented and discussed. This same verb also appears in the Acalan Chontal document in its primary sense of “to come.”

²²⁷One could also theorize that this information was written in a nearby inscription but I do not think such an assumption was a necessary requirement for this enclitic to function. Because the person referred to here currently ruled Tikal, knowledge of his seating as ruler could, of course, be safely assumed.

talihix me frai diego pesquera tuchalub ocixme yuwal uthani uchoyel cah talik tixchel tuchalubil (Paxbolon et al. 1614:166.25-26)

After Fray Diego Pesquereale **came** for the second time, (?) then he said it was the moving of the people, they must/would go to *Tixchel* for the second time.

Just as in the Classic Ch'olan example shown in Figure 232, reference is made to a past event that is not explicitly referred to otherwise in the same text.²²⁸ In this case, there does not seem to be any explicit logical connection between the two events, that of the coming and the speaking, but the implicit message might be to emphasize that Friar Diego Pesquereale delivered the news in person. At any rate, the enclitic *-ihi* is used here, along with *-ix*, to indicate that the coming is the earlier event of the two. This again makes its purpose clear, to indicate on the verb reporting the earlier event its temporal relationship to the main verb in the next clause. This is yet another clear example of this enclitic operating in a context in which the verbs are also inflected for aspect since both *talihix* and *uthani* are inflected for the completive. However, this enclitic functions within a category different from aspect and is not dependent upon it.

6.3.3 Intratextual Self-Reference – Acalan Chontal Only

There are passages in several hieroglyphic texts that are written from a first person perspective and still others that quote what someone is saying or has said. There are also Classic texts in which direct quotes are followed by an attribution to the speaker, for example, on the Hummingbird vase (Figure 240 below). Other examples include the use of a quotative particle preceded or followed by a text that is reported as having been or being spoken or written (cf. Grube 1998). Some scribes and carvers have signed their

²²⁸This is also specifically noted by Scholes and Roys (1968:396-97, fn. 100). Of the three examples of *talihix* presented in this study, only in this case did Smailus (1975:92) and Scholes and Roys explicitly translate this verb. That is significant because it is the only passage of the three in which *talihix* stands as the only verb, making it difficult to avoid. It is also the only passage in which *tal* is used in its literal meaning of “to come.” In the others, it is used in the figurative sense of “come about” or “happen” instead.

names on monuments and ceramic vessels or included their names somewhere in the text. However, as yet there have been no texts identified in which Classic-Period Maya scribes refer in the first person to something already written earlier in the same text. The writer of the colonial period *Paxbolon-Maldonado Papers* frequently employs this type of back reference. Most often, he uses the transitive completive form of the verb whose root is the noun *than* (*t'an*) “word” and as a derived verb means “to speak” or “to say.”

[Incomplete:]

a) *yuual uthane uthan dios* (Paxbolon et al. 1614:167.1)

Now **they speak** the word of God

[Completive:]

b) ... *yuual uthani uchoyel cah* ... (Paxbolon et al. 1614:166.25-26)

... then **he said** that the people are moving [it is the people's moving] ...

c) ... *ukal uxlub chanlub uthani takba chançabiliceti* (Paxbolon et al. 1614:161.17-18)

... because **he said** three times or four times to me, “You ought to be killed.”

[Completive + -ihi ∞ -i clitic:]

d) *cahi uyithocbel paxbolonacha ahau acathanihi* (Paxbolon et al. 1614:159.24-25)

They began to join up [it began their joining up] with Paxbolonacha, the ruler. **I just mentioned him earlier.**

e) *hal xach hiliob chumuanib ya ta chanpoton acathanihi* (Paxbolon et al. 1614:162.32-3)

For a long time then they rested and they sat around in Champotón. **I just mentioned it earlier.**

f) *tali uchandzac aHau ukaua paxua upenel chanpel acathanihi* (Paxbolon et al. 1614:156.3)

He came, the fourth ruler in line. His name [was] Paxua, the son of Chanpel. **I just mentioned him earlier.**

[reconstruction and analysis:]	<i>a-</i>	<i>ca-</i>	<i>than-</i>	<i>i-</i>	<i>Ø-</i>	<i>[i]h-i</i>
[ALMG orthography]	<i>a-</i>	<i>ka-</i>	<i>t'an-</i>	<i>i-</i>	<i>Ø-</i>	<i>[ij]j-i</i>
	ADV..PRC-	1SE-	speak-(TV)	COM-	3SA-	ADV.ENC

Figure 234. Examples of verb *than* (*t'an*) in incomplete, completive, and completive with deictic enclitic *-ihi ∞ -i* in *Paxbolon-Maldonado Papers*.

The examples in Figure 234a-c show the verb *than* with incomplete and completive inflection in contexts where there is no back reference. This means that the referent of the unmarked absolutive pronoun (*-Ø*) is not being explicitly pointed out as

present in a previous sentence or clause.²²⁹ In these examples, the absolutive dependent pronoun, also called a “person marker,” is a deictic enclitic which points to a nominal referent in the same sentence or whose referent is not being explicitly linked to the current statement. In example 234a, the referent is *uthan dios*, “the word of god.” In 234b, it is *uchoyel cah* “the moving of the people.” Note that although the dependent pronoun is unmarked in these third-person singular examples, its deictic function is still intact. Just as in Classic Ch’olan, Acalan Chontal verbs normally require or assume a dependent pronoun as agent, object, or intransitive subject. From a purely grammatical standpoint, they do not require an explicit nominal referent in any of the three positions. However, they do require a pronoun even if there is a nominal subject or object present.

In the examples in Figure 234d-f, the pronominal referent is included in the previous sentence and the still earlier mention of the person or event precedes it in the narrative.²³⁰ In the Figure 234d passage, the referent is *Paxbolonacha* who was mentioned earlier in the narrative. In the Figure 234e example, it is the event *hiliob chumuanib*, “they rested and were sitting around,” that is mentioned earlier by the scribe. It is the direction of the time difference in the narrative between the current statements and the earlier ones which triggers the attachment of the deictic enclitic indicating time in the past. That temporal indicator is the adverbial deictic enclitic *-ihi-i* which is translated here as “earlier” although some other equivalents would also be appropriate depending

²²⁹Because the absolutive (Set B) dependent pronouns are obligatory and those referring to all the other persons in the set are marked, the lack of an absolutive person marker signals the 3rd person singular. There is no alternate marked 3rd person dependent pronoun that can take the place of the null (-Ø) form.

²³⁰These passages have been translated somewhat literally although I have still tried to provide a result that is readable in English. Elsewhere (Wald 2004b) I translated many of the sentences that consist of a completive and an enclitic by couching them in terms of an English perfect, such as “**I have already mentioned him.**” The problem with doing so is that some have interpreted them as indicating the presence of the perfect (my resultative) in the Acalan Chontal document (cf. MacLeod 2004:307-308). This is not at all the case. That proposal will be discussed at length later (see Section 6.4.5.3) since arguing against that view involves data not yet presented in this section.

These passages could also have been translated more colloquially by expressing them in the form of subordinate clauses such as, for example, “. . . the son of Chanpel, **whom I just mentioned earlier.**” However, *acathanihi* is not a subordinate clause. All the necessary elements are present for it to stand completely on its own, as is clear from the analysis presented in Figure 234. The sentence *acathanihi* contains neither relative pronoun nor subordinate conjunction but simply the Chontal third-person ergative and absolutive person markers.

upon the context. For example, if the Chontal author had mentioned the particular time at which it was written, then a translation such as “ago” or a combination of preposition and temporal pronoun such as “from when” or “until” might be appropriate just as it is in Classic Ch’olan when distance numbers are involved.

In sum, it is not the *-ihi* ∞ *-i* suffix that accomplishes the reference. That is the job instead of the absolutive person marker.²³¹ After the dependent pronoun establishes the reference, it is the *-ihi* ∞ *-i* enclitic that indicates the relative temporal placement of the referent’s previous mention. It adds temporal, not identifying information. It serves not as a dependent or demonstrative pronoun but rather as a temporal adverb with the general meaning of “in the past” or “earlier.” In English, it can be given a translation such as “ago,” or “earlier,” or a more complex conjunctive clause, depending upon the context and style choices. For these particular examples with this verb and others used for this type of intra-textual, self-conscious back reference, the temporal difference is that of narrative time. It provides information about something that happened earlier in the textual narrative, that is, the earlier *mention* of a particular person, thing, or event. It does not supply information about an external event that might have happened earlier in extra-textual event time. This is not meant to imply that *-ihi* ∞ *-i* can only be used for deictic narrative references. Instead, it can be used to point back in event time, but does not in these and similar contexts. In any case, what it does in both types of contexts is add temporal, not identifying information.

There is however a noticeable difference between these examples of intratextual, self-conscious back reference in Figure 234d-f and the other examples of the temporal deictic enclitic *-ihi* ∞ *-i* in the *Paxbolon-Maldonado Papers*. The verb stem is here preceded by the 1st person singular ergative (Set A) person marker *ka*, representing the subject of the intransitive verb, which is the author himself. Because the temporal difference involved here is one of narrative time and the pronominal referent of the

²³¹ Some confusion has arisen in the past because Smailus (1975:142) refers to *-hi* as a “sufijo demostrativo: ‘esto, lo referido’”. He is addressing the same morpheme as being referred to here, but it is clearly **not a demonstrative suffix** and **does not mean “that which was referred to.”** That should become clear as this discussion continues.

absolute (Set B) pronoun is the actual previous mention of an event or person in the same physical narrative, it is viewed as having occurred in the very recent past. For that reason, the proclitic *a-* is attached to *-cathanihi* here and in other similar examples in the *Paxbolon-Maldonado Papers* as shown in the Figure 234 reconstruction and analysis. The *a-* proclitic has the effect of moving the time established by the enclitic *-ihi* ∞ *-i* closer to the present, even up to the immediate past. Regardless of the actual time of writing, the author is regarding his writing and the audience's reading to be something quite recent. I have used the English word "just" for the translations in Figure 234 to reflect the adverb that in Acalan Chontal takes the form of the proclitic *a-*. As will be seen, the Acalan Chontal scribe does not attach the *a-* proclitic to verbs with the deictic enclitic *-ihi* ∞ *-i* in other contexts because those events did not happen in the very immediate past as has the composition of the text itself.²³²

This set of texts from the *Paxbolon-Maldonado Papers* illustrates two characteristics already noted about the past-referential enclitic. First, these examples provide evidence that *-ihi* ∞ *-i* is deictic because, although it always points to the past, the precise location of that time in the past is provided only by the location of the referent of the dependent pronoun, in these examples, the absolute Set B pronoun. It therefore does not provide a definite time but one that is variable relative to the context. Second, it does not represent completive or past verbal inflection. The verbal inflection is already

²³²Note that Smailus (1975:126) misinterprets this proclitic as indicating simply completive aspect "la acción sugerida por el verbo ya está terminada" (the action suggested by the verb has already ended"), but he also writes that he is not really sure of this interpretation. Rather, the aspectual inflection indicating completive is already provided by the suffix *-i*. Keller and Luciano G. (1997:240), however, do find this same proclitic *a-* used in modern Chontal. Moreover, it is used in precisely the same way as it is here in Colonial Acalan Chontal. "El proclítico *a-* se combina con cualquiera de los dos tiempos generales (presente or pretérito, o con el tiempo específico futuro) **para indicar acción inmediata** or próxima del tiempo general. . . . Cuando se combina con el pretérito, **indica pasado inmediato**." In sum, in each context it moves the time referred to closer to the present whether the verb be inflected for the incomplete, completive, or future. I disagree with Robertson et al. (2004:263) that the prefix *a-* in the *Paxbolon-Maldonado Papers* "is attached to the completive to give a sense of "already." That is supplied by the combination of the completive aspect suffix, the null absolute pronoun, and the *-ihi* ∞ *-i* enclitic. As such, "already" is rather a more colloquial way of expressing in English the gist of the Chontal statement, while a more literal English translation would not include that word at all. The *a-* enclitic, on the other hand, simply moves the time to the more recent past when used with the completive and the "earlier, ago, past" enclitic. As already stated, this is signaled in my English translation by the word "just."

supplied by the first *-i* suffix on this verb stem which in Acalan Chontal is the completive aspect marker for almost all verb stems.²³³ Instead, what the enclitic provides is adverbial indication of the direction in which the specific text referred to by the author or narrator can be found. The dependent pronoun sets up the reference, “it/she/he,” and the enclitic indicates the temporal direction of that referent, “earlier, before, after, ago.” It is concerned with defining the temporal relationship between the current report of an event or person and its previous mention within a text or body of texts. As such it does not fit the definition of either completive aspect or past tense. Of course, when translating these passages into languages which inflect for incomplete/completive aspect or present/past tense, a decision has to be made as to which should be used on the verb stems. Since these are back references within the discourse, this would normally be completive aspect or, in English, the past tense.

6.3.4 Passages Providing Supplementary Identifying Information

Up to now, the examples from the Classic inscriptions have shown the enclitic *-ijiiy* ∞ *-iiy* used on verbs and time-period nouns to aid the flow of the narrative while also indicating the direction of the temporal difference between two events. It orders them into anterior and posterior by virtue of its basic “in the past” or “earlier” meaning. Although not able to supply the grammatical or linguistic details, proponents of the AEI-ADI interpretation already noticed this function in practical terms. However, it did not adequately account for the use of the AEI in many passages not involving distance numbers if indeed it recognized them in those contexts at all. The passages that will be examined next provide additional information of a different type.

²³³It should be noted, as will be discussed later, that the *-i* of the completive and the first *i-* of the enclitic merge. That same *-i* completive suffix can be seen without the enclitic in Figure 234b and 234c.

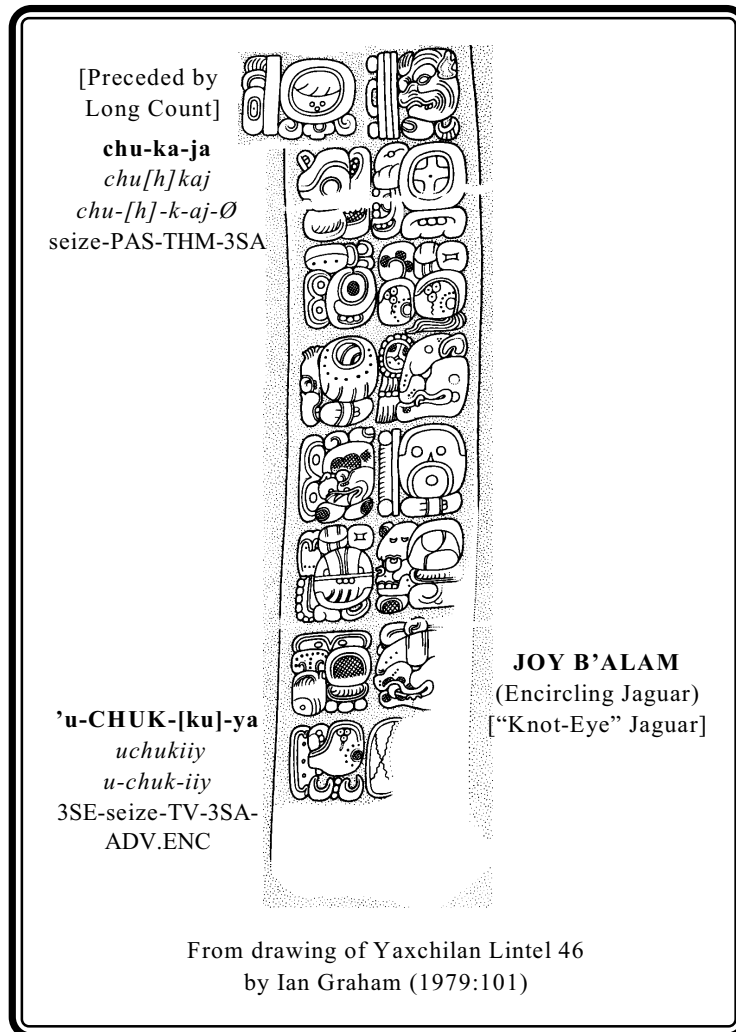


Figure 235. Temporal deictic enclitic *-iiy* attached to a root (CVC) transitive verb compound referencing just-mentioned ruler

6.3.4.1 In Classic Ch'olan

Figure 235 contains a passage in which the temporal deictic enclitic *-ijiiy* ∞ *-iiy* is used on a verb in a sentence that supplies additional information about a person mentioned in the previous sentence.

ti ho' ix huklaju'n uniiw chuhkaj aj k'an usij b'uk tuun ajaw ub'aak itzamnaaj
*b'ahlam utz'akb'u uto'k' upakal joy b'ahlam **uchukiiy etz'naahb' [suutz']***

On 5 Ix 17 *Uniiw* he was captured, Yellow Vulture, a Scattered Stone Lord, the prisoner of *Itzamnaaj* Jaguar; he maintained (“put in order”) the flint and shield of Encircling Jaguar; **he captured Flint [Bat] earlier/back then.**²³⁴

The purpose of the last sentence *uchukiiy etz’naahb’ [suutz’]* “he captured Flint [Bat] earlier/back then” is apparently to identify the person, the ancestral ruler *Joy B’ahlam*, by connecting him to an act or event which is either generally known, or perhaps to one which had already been presented in this or another text. It may be significant that the capture by this earlier ruler to which this appended sentence refers was reported on the stairway below this lintel. The relevant part of this stairway can be seen in Figure 241b below. There is, however, no explicit reference to that text in the current passage.

The nominal referent of the dependent pronoun, in this case the ergative pronoun, is not in doubt. It points directly to the name of the ruler *Joy B’ahlam*, which ends the previous sentence.²³⁵ The use of the temporal deictic enclitic *-ijiiy* ∞ *-iiy* in this context seems to depend upon this reference back to an event in the relatively distant past. This sentence recalls an earlier event but not for the purpose of providing temporal information as in Figures 231 and 232, but for adding information about previous activities performed by the referent. The flow of the main narrative timeline has stopped and old identifying information is interjected. The past deictic enclitic explicitly indicates that this information is about past events. Since it is linked not directly to another event but rather to the name in the previous sentence, the function that is being performed by the adverbial enclitic here is **not similar to verbal taxis**. Instead, it is simply serving to

²³⁴In more free-flowing English prose, one might translate the highlighted part as “He is the one who captured Flint Bat.” However, this might give the impression that Classic Ch’olan used a relative pronoun here, which is definitely not the case.

²³⁵I have called this usage “appositional” elsewhere (Wald 2000a:131-132) and still think that term describes well the relationship between the syntactical referent, *Joy B’ahlam*, and the dependent pronoun in the next sentence. I have avoided it here although both have the same extratextual referent, the ancestral ruler. That is because the strict definition of “appositional” calls for the units in apposition to be at the same grammatical level and in the same sentence. If one allows “apposition” to cover the syntactical relationship between a noun in one sentence and a pronoun in the next, the term is still an apt description.

indicate that this capture of Flint Bat took place earlier, and not at the time of the other events being described nor at the current point in discourse time.²³⁶ The reason it is not similar to taxis here is not because the meaning of the enclitic is different in this context, but simply because it does not function here in the capacity of marking the temporal relationship between two verbs or events. Because *-ijiiy* ∞ *-iiy* is an adverb and an enclitic that is not grammaticalized as taxis, it is not limited to functioning in the same way as a verbal suffix. Just as it can be attached to adjectives, nouns and verbs, it can also appear and function in non-taxis contexts just as can other temporal adverbs.²³⁷

6.3.4.2 In Acalan Chontal

A similar discourse pattern is also found in the *Paxbolon-Maldonado Papers*.

hain aHau paxbolonacha acathanihi ayan uxtul uppenelob pachimalahix ukaba don luis paxua ukaba uppenel hainix bane pudzihi (Paxbolon et al. 1614:156.28-30)

This king, Paxbolonacha, I mentioned him earlier, had three sons. He [the one] named Pachimalahix, his son was named Don Luis Paxua. This one **fled** earlier (back then).

While the highlighted verb in the Acalan Chontal passage is intransitive and on the Yaxchilan lintel in Figure 235 transitive, both clauses add information concerning the just-named individual. In the *pudzihi* sentence, the deictic enclitic absolutive person marker *-Ø* points to the referent *Don Luis Paxua*. In the Classic Ch'olan *uchukiiy* clause, it is the deictic ergative dependent pronoun prefix *u-* that does the same for *Joy B'ahlam*.

²³⁶ Although I believe that this is how the enclitic operates here, there are examples which we will examine soon in which the time difference is that of pure discourse time, not actual event time. That could be argued here as well.

²³⁷ It should also be noted that, as with some other enclitics, it is not limited at all to modifying only the word to which it is attached. It may instead also modify the phrase, clause, or sentence as a whole despite its not being able to stand alone in them. That is why, although it is a temporal adverb, it can also be attached to nouns.

They both use the temporal deictic enclitic, *-ihi* or *-iiy*, to indicate that an event used to identify a person happened in the past, was known by the narrator, and was presumed to be known by the reader before its appearance in the current narrative. Both the Acalan Chontal and the Classic Ch'olan clauses mention a previous event in the person's life and use the same narrative method to link the person just mentioned to that earlier event. For the Yaxchilan example, the information is recorded on the stairway below this lintel. For the Acalan Chontal example, we have this earlier passage, among others:

pudzi don luis tu pixan chuil maria magdalena tu 22 ukinil u julio acathani.

(Paxbolon et al. 1614:167.9-11)

Don Luis **fled** during the feast of Saint Mary Magdalen on the 22nd day of the month of July. I mentioned it earlier.

The verb *pudz* (*putz'*) occurs here with the *-i* suffix marking intransitive completive inflection. While both examples of this verb are used to report events as completed, the *pudzihi* example represents a step out of the current narrative timeline to refer to past knowledge assumed to be part of the reader's repertoire. Note that the temporal deictic enclitic does not occur on the verb *pudzi* here in the second passage because the writer is simply reporting an event that had already been completed, that is, his fleeing. In the previous passage *pudzihi* verifies that this is the specific person to whom the previously known information applies but does not add new information about the event. Unlike *pudzihi* in that previous passage, *pudzi* does not refer to information given elsewhere but is simply stating facts about the flight. Although there is a reference to earlier statements at the end of the passage using *acathani*, there is no direct syntactical or discursive connection of this back reference to the verb *pudzi* in the previous clause.

Another intransitive verb that is used in a similar context in the Acalan Chontal document is *bix* (*b'ix*) meaning "to go" or "to travel." Two of its thirty-two occurrences

have the enclitic *-ihi* ∞ *-i* attached. This is one of them. It is reproduced here in context along with the Smailus and the Scholes and Roys translations.²³⁸

*cayx uchaakcel cah tukab diego de aranda ma cuuil yithocob mach ymach uyaki
cah tuba **bixiHix** campech* (Paxbolon et al. 1614:166.2-4)²³⁹

Both Smailus and Scholes and Roys ignore this verb completely in their translations of this passage.

Entonces se volvió a dar el pueblo a Diego de Aranda en encomienda (en la mano). Yo no sé quien de ellos dio el pueblo en encomienda a Campeche.
(Smailus 1975:88.1-3)

Afterwards the town was given *en encomienda* to Diego de Aranda. We do not know who put these pueblos under the jurisdiction of Campeche. (Scholes and Roys 1968:396)

This passage provides another example of how both Smailus and Scholes and Roys have missed the importance of especially the *-ihi* enclitic but also, in this case, of the *-ix* enclitic, both of which serve a similar purpose here and elsewhere whether alone or combined on the same verb. Even if one were to dispute the presence of *-ihi* here, the presence of *-ix* is virtually indisputable. Both translations ignore not only the enclitics but the verb *b'ix* itself in their translations. In some cases, leaving out such verbs does not change the meanings of the passages much because they are often used to fill in additional or background information. Leaving it out here led to a different interpretation of the second sentence. I translate it more literally as follows:

²³⁸Scholes and Roys (1968:vii) also give credit to Eleanor B. Adams for “her English translation of [the] Spanish version [which] was used in working out the final translation as it now stands.”

²³⁹An uppercase *H* in the Chontal text indicates that the letter was written in a style that makes it impossible to distinguish between an “*h*” and a “*k*” except by context (cf. Smailus 1975:185).

It began, the second giving of the town into the hand of Diego de Aranda. I do not know who among them was the one who gave the town to him. **He traveled to** Campeche.

A more colloquial translation of the last sentence that adds words not in the Chontal original but more clearly expresses the meaning in English might be, “**He** was the one who **traveled to** Campeche.” It is not Campeche into whose hands (*en encomienda*) the town was given. It was Diego de Aranda in both the first and second sentences. What the author “do[es] not know,” is who had the duty to go to Campeche to turn the town over to Diego de Aranda. Although the narrator does not know that person's identity, he assumes the intended readers already knew that a trip to Campeche was necessary to accomplish the turnover.

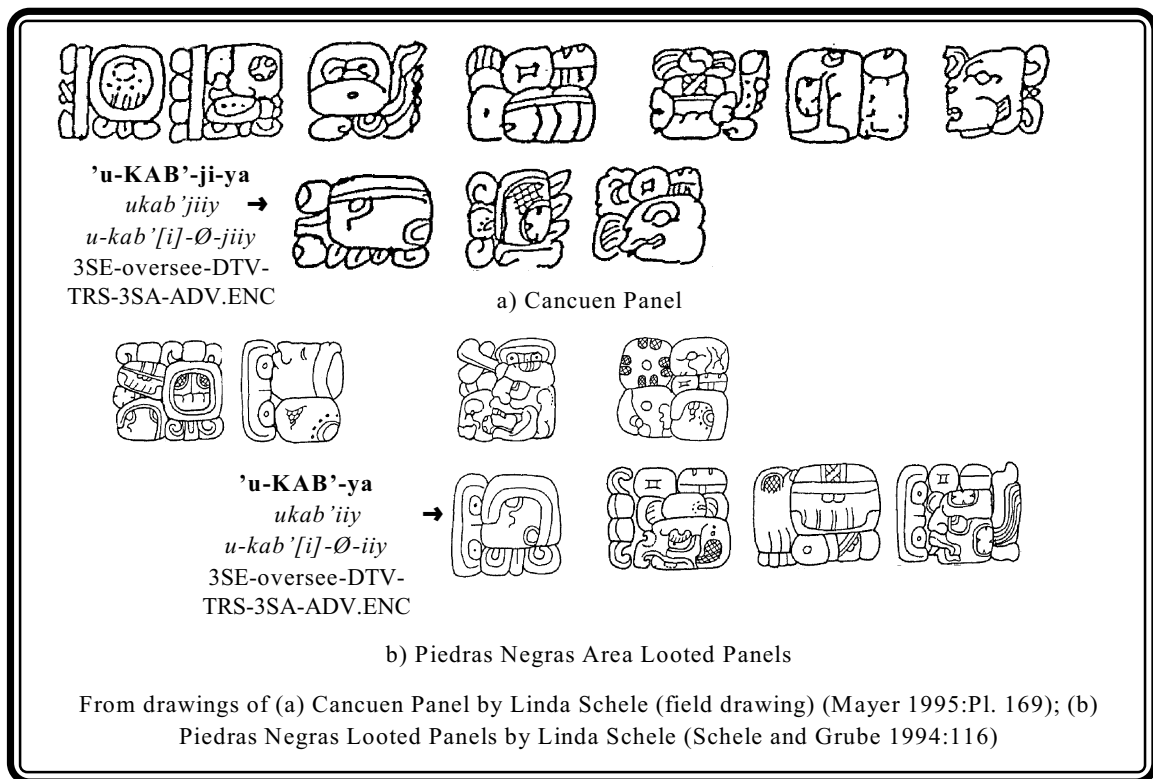


Figure 236. Examples of two different grammatical forms of *ukab'i* in referential contexts

6.3.5 Additional Information About Contemporary Event

6.3.5.1 Identity of Responsible Party

The examples we have just examined from both the Classic Ch'olan inscriptions and the *Paxbolon-Maldonado Papers* supply additional information about specific individuals mentioned in previous passages. There are several similar examples from the Classic inscriptions that include the temporal deictic enclitic *-ijiiy* ∞ *iiy* but refer to a previous event as a whole rather than to a particular person or thing. Two very common verbal compounds used in this way are *ukab'jiiy*, and *ukab'iiy*, examples of which can be seen in Figure 236. In context, both of these verbal compounds refer back to an event just mentioned in the narrative. Several years ago, Houston and Stuart (pers. com.) offered a promising source for the underlying verb, *chab'i*, a derived transitive verb attested in Tzotzil as meaning “to govern, guard, oversee” (cf. Laughlin 1988:184). In the inscriptions, this compound is most often written with the T526 KAB'/KAB'AN sign, which in several contexts interchanges with the syllables **ka-b'a**. This substitution pattern seems to indicate that in the Classic Ch'olan inscriptions this lexeme was pronounced *ukab'i*, instead of *uchab'i*, leading to my transcription *ukab'jiiy* and *ukab'iiy* for these compounds.²⁴⁰ Despite this possible discrepancy with its historical ancestor, both its meaning, “to guard, govern, oversee,” and its transitivity provide a good fit for the syntactic and semantic contexts of its use.

To illustrate how this verb with the attached *-ijiiy* ∞ *-iiy* enclitic functions in context, here is a transcription of the passage shown in Figure 237:²⁴¹

ipas(?) b'olon chuwe'n b'olon uniiw mahkaj ixik (na?) naman ajaw ukab'jiiy
(Ruler 2) *chan winikhaab' ajaw k'uh(ul) yokib' ajaw.*

²⁴⁰It should also be noted that the word for “land, earth, soil” in the colonial and current Ch'olan languages is *kab'* rather than *chab'* (when not *lum*). This word has an initial /k/ rather than /ch/ because it was likely borrowed into Ch'olan after the split from Greater Tzeltalan. Kaufman and Norman (1984:122) also reconstruct **kab'* for Proto-Ch'olan. A summary of this sign's decipherment prior to 1994 can be found in Schele and Grube (1994:17a-18).

²⁴¹A larger part of this inscription has already been shown above in Figure 231.

. . . and then it dawned 9 *Chuwe'n* 9 *Uniiw* [when] Lady *Naman* Lord was betrothed. He oversaw it, “Ruler 2” the 4-score years Lord, the holy “Piedras Negras” Lord.

The verbal compound *ukab'jiiy* refers back to an event just mentioned in the narrative. In this case, that event is the betrothal of a Lady from *Man* to *Yo'nal Ahk*, at this time the heir to the throne and, very shortly thereafter, Ruler 3 of Piedras Negras. It is that event, *mahkaj ixik naman ajaw*, that is the referent of the absolutive person marker \emptyset in the word *ukab'jiiy*. The person overseeing the event is *Yo'nal Ahk's* father, Ruler 2 of Piedras Negras.

In another passage, not repeated here but included earlier in Figure 230, it is the surface of Ruler 2's headdress being adorned, *nahwaj unuk ukojaw*, that a representative of the Calakmul ruler oversaw. Here, in Figure 236a, it was also a representative from Calakmul who oversaw the seating in reign *chumwaan ti ajawle(l)* of the ruler of Cancuen. Because *kab'i* (*chab'i*) is a derived transitive verb, it has two arguments. The nominal subject and referent of the ergative dependent pronoun follows the verbal compound *ukab'jiiy*. The ergative Set A dependent pronoun prefix *u-* serves as the pronominal subject and points to the nominal subject, in this passage Ruler 2 of Piedras Negras. That nominal subject is within the sentence that begins with *ukab'jiiy*. If it were also present in the same sentence, the nominal direct object would intervene between the

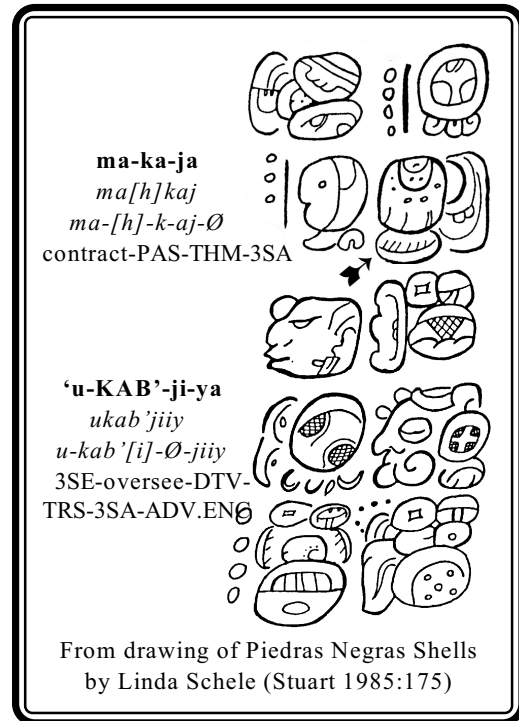


Figure 237. Past temporal enclitic indicating discursive back reference

nominal subject and the verb, but that is not the case here. Instead the nominal referent of the absolutive Set B pronoun -Ø, which serves here as the only direct object, is the previous event as a whole. That referent precedes even the verbal compound. Although it is otherwise usual for the nominal referent of the absolutive pronoun to follow the verbal compound, there are many sentences such as this one in which it does not.

In Section 4.1.3, it was noted that the suffix -*VVj* is used to inflect transitive verbs for the resultative aspect. As stated there, MacLeod (2004) originally proposed and argued convincingly that this form is inflected as a “perfect.” Although I agree with her identification, I prefer to characterize it instead as a resultative both in its Tzeltalan and Classic Ch’olan form.²⁴² In Figures 230, 236a, and 237, *ukab’jiy* is a derived transitive verb inflected for the resultative aspect and has the enclitic -*iiy* attached. As such, the resultative emphasizes the state of the subject resulting from the action, a state which remains with that subject. This emphasis underscores that the ruler was and remains the overseer of that event and he bears both the responsibility and the acknowledgment that might derive from that action.

In Figure 236b, *ukab’iiy* is not inflected as a resultative. If indeed the resultative suffix is written glyphically by **ji**, and if this is to be transcribed as -*VVj* (here -*iiy*), then one can hardly presume resultative inflection to be present when the suffix is not written. Resultative aspect is not an unmarked verbal category. Note that this situation is not the same as occurs when the suffix is shortened by the elision of a vowel. Such phonetically motivated elision happens regularly and not only with the resultative, but also with the passive, positional, and other suffixes in Classic Ch’olan when an enclitic is attached to verbs with suffixes. Because the stress is usually on the final syllable of words in Mayan languages, ellipsis and merger of vowels in the penultimate syllable of multisyllabic compounds and inflected words is not unusual. But unless one can show other changes within a particular word that regularly result from the ellipsis of a complete suffix, it

²⁴²I use the term “resultative” and Haviland (1988:92) “stative” since in Tzotzil and Tzeltal it reflects the result of an action and not the action itself, is not a participle but an active verb, and is easily translated as an actional perfect into English and Spanish only in certain contexts or when certain auxiliaries or temporal adverbs are present in Tzeltalan.

seems difficult to argue for the presence of a marked suffix that is not there. Therefore compounds such as this that provide no sign at all of either a *-VVj* or even a remaining *-j* cannot be considered to be inflected for the transitive resultative aspect. The mere location of the nominal object of the verb in a previous sentence is not a sufficient criterion for the presence of the resultative. Any transitive verb no matter how it is inflected can have its nominal referent in a different sentence as long as the absolutive dependent pronominal object is present in the current one. What is more, even if the pronominal object is in the 3rd person singular, and so is unmarked, it can still fulfill its referential function and does not require the resultative aspect to do so.

Neither the resultative suffix nor the past temporal deictic enclitic need be present in *ukab'i* sentences to make them grammatical. The verb plus enclitic form *ukab'iiy*, as shown in Figure 236b, can operate alone to report additional information about an event. It still references the previously reported event by means of the dependent pronoun and includes the temporal directional indicator back to it for discursive purposes. Although not immediately relevant here, this verb can and does exist in similar contexts as *ukab'ijj* inflected for the resultative but without the past temporal enclitic present to provide a discursive signal directing the reader back to the nominal subject. Although in each case the connotation is somewhat different, neither is ungrammatical. Also very important for arguments to be made later, is that neither the aspect nor tense of the verb is affected by this difference.

Although the whole *ukab'jiiy* passage is an independent sentence containing a subject, verb, and object, it is nevertheless used to indicate a specific type of agency for the previous event. For that reason, it usually accompanies sentences whose verbs are in the passive and mediopassive moods. This is unlike English and many other languages, including even some modern Maya languages, that most often employ a prepositional phrase for expressing agency rather than a complete sentence as in Classic Ch'olan.

Taken in their discursive context, sentences headed by *ukab'jiiy* and *ukab'iiy* focus directly on the event just reported and provide additional information about it.

They inform the readers as to who oversaw or governed a particular event. In doing so, they share an important characteristic with sentences that add temporal information. They refer back most often to something actually mentioned earlier in the text, even though the event itself may not have, and usually has not, really occurred earlier in time. After reporting the original event, the writer and reader have moved on to the next position in the narrative. Because the *ukab'jiiy* sentence occurs later in the narrative and refers to an earlier part of it, the temporal deictic enclitic *-ijiiy* ∞ *-iiy* is often attached to the verb to indicate the direction of this narrative back reference. It indicates the temporal direction of the reference within the narrative or discourse itself. So, unlike some of the other uses we have examined, there is no indication that the event referred to actually happened earlier but simply that information is being added concerning a discursively earlier event. The deictic enclitic indicates the temporal direction of the referent in the context of earlier narrative or discourse time, not of extra-narrative event time.

6.3.5.2 Locative Information

Earlier we examined the role that *uhtiiy* plays in a common pattern of discourse that aids narrative flow in hieroglyphic texts. At the same time, it combines with distance numbers to add information concerning two events, namely the time interval between them expressed by means of time-period counts commonly referred to as “distance numbers.” The temporal deictic enclitic *-ijiiy* ∞ *-iiy*, often appearing on both the verb and some of the time-period nouns, signals the direction of the temporal reference thereby indicating which of two events is earlier relative to the other. In other words, it performs a role similar to *taxis*. Because it is an intransitive verb, its subject is indicated pronominally by the absolutive person marker. Since the referent is an event in such cases, it calls for the third person singular dependent pronoun which is unmarked (*-Ø*). The nominal subject, the event, is usually reported in an earlier passage, most often in the immediately preceding one.

There is another common pattern involving the same verbal compound which adds information about a contemporary event instead, and so is obviously presented without the concomitant use of distance numbers. An example of this type of discourse pattern can be seen in Figure 238. Here is a transcription and translation of this passage.

*b'olon ik' chum sak ajawniiy hemnaal ixik muwan mat yitaaj ju'n na kinu'w
uhtiiy matwiil*

On 9 *Ik'* the seating of *Sak*, she became lord, the valley-place Lady *Muwan Mat*. She accompanied her, the first Lady *Kinu'w*. **It happened at *Matwiil*.**

The verb *uht* behaves in Ch'olan like a CVC intransitive verb. Its 3rd person singular dependent pronominal subject is unmarked (-Ø). The dependent pronoun's referent is a group of previous events, the accession of Lady *Muwan Mat* and her being accompanied by Lady *Kinu'w*, the ancient counterpart of the mother of the current ruler, *Ahkal Mo' Naahb'*. The *uhtiiy* sentence adds information about where the event took place. This reference back in the text represents a break in the progression of narrative time for the purpose of adding an additional piece of

information. The deictic enclitic *-ijiiy* ∞ *-iiy* serves to indicate not that the referenced event itself is earlier in calendric time but only that it is earlier in discourse time, that is, earlier than the time at which the current sentence is being written or read. It shares this characteristic with the *ukab'jiiy* examples and differs from the earlier example of *uhtiiy* in

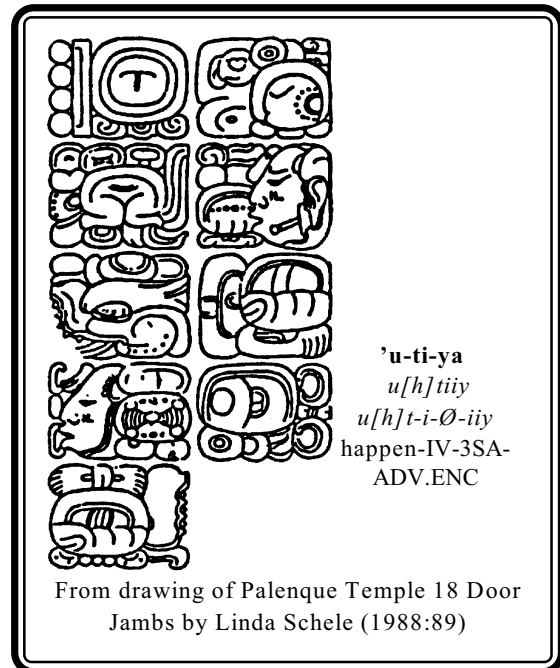


Figure 238. *Uhtiiy* sentence giving location of previous event

Figure 230 which is accompanied by distance numbers and involves instead extratextual, calendric time.

Because the verb in locative contexts is written **'u-ti-ya** and because *ti* seems to be the most common preposition in Classic times, it has at times been interpreted as a combination of the verb *uht* and the preposition *ti*. This interpretation would certainly not work for certain sites west of the Usumacinta such as Palenque and Tortuguero where the common preposition is not *ti* but *ta*. Positing a **ti/ta** polyvalence for T59 and other attested **ti** and **ta** signs to explain this difference creates even more problems than it resolves. Most of these **ti** and **ta** signs are also used as syllables in words that would not require nor allow polyvalent values. Polyvalency seems to be required only to justify this verb plus preposition interpretation of **'u-ti-ya** and the desire to permit the transcription of one's preconceived version of the preposition. However, as was noted by Stuart and Houston (1994:15), a more promising explanation is that "locatives [that is, locative prepositions] can be shown to be optional elements in the writing system."

tali cuçumil (Paxbolon et al. 1614:155.22)

he came [from] Cozumel

Note that there are also passages in the *Paxbolon-Maldonado Papers* in which the preposition *ta* is used and still others in which the name of the town has incorporated *ta* making another preposition redundant. In sum, *uhtiiy* in locative contexts is not just similar in form to *uhtiiy* used with distance numbers to refer to a previous event, it is exactly the same compound.

Although it is usual for an *uhtiiy* locative sentence to follow in the narrative the event for which it supplies additional information, the example in Figure 239 provides a departure from this pattern. The passage begins with the *Tzolk'in* date. *Huk Ak'b'al uhtiiy k'in witzil pip 'a chan ch'e'n . . .* "Seven *Ak'b'al*, it happened that day at the mountain of the *Pip ha'* sky cave. . . ." The actual event comes next, beginning with a

demonstrative pronoun and a focus antipassive sentence construction, which by itself highlights the unusual, rhetorically-charged pattern of this text.

This passage shows that it is not just the physical relationship of the *uhti*y sentence and its referent in the narrative that triggers the use of the *-ijiiy* ∞ *-iiy* enclitic. Instead, it is the logical priority of the original event that is most important. Although the *uhti*y sentence precedes the report of the event for which it provides the location, the latter event still maintains the logical priority. For that reason, *uhti* still carries the past enclitic indicating the direction of the reference. In this respect, the pattern follows that of the focus antipassive itself, which reverses the order of the verb and the subject by pulling out both the nominal and pronominal subject. In this unusual case, it is the grammatical, rhetorical, and poetic style of the passage that causes the transposition. Despite the physical order, it is still the subordinate relationship of *uhti*y to its referent event, for which it provides locative information, that evokes the temporal deictic enclitic in these and similar situations. It is not the main event itself but simply adds further information about that event.

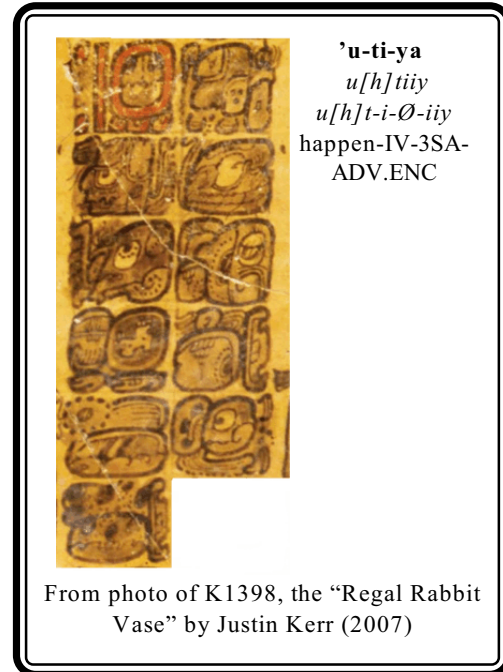


Figure 239. Temporal enclitic *-iiy* in locative sentence that precedes dependent pronoun referring to it

6.3.5.3 Contemporary Event: Information about Direct Discourse

Another uncommon but significant use of the temporal deictic enclitic *-ijiiy* ∞ *-iiy* occurs in statements following direct discourse. The transcription and translation of the direct quote, the first four glyph blocks, are not yet completely clear in Figure 240. Still, the appearance of the second person ergative person marker in the third glyph block

(*awichnaal* “in front of you, with you”) strengthens the impression already given by the scene painted on the vase. The following statement removes any doubt: *yalajiiy tz’unun ti itzamnaaj* “He said it, hummingbird to *Itzamnaaj*.”²⁴³

First, the actual words of the speaker, the hummingbird, are quoted. Then, there is a discursive break to comment on the quote. This information is about who spoke the words and to whom they were spoken. The absolutive pronoun (-Ø) points back to the words of the hummingbird. This motivates the presence of the enclitic *-iiy* on the verb because of the reference back to what was said before the discursive break. The speech itself obviously took place before the commentary on whose speech it is. Still, the use of the enclitic helps the flow of the discourse by providing the temporal direction back to the quoted words. Finally, the transitive verb *al* is inflected for the resultative aspect. This helps to securely tie the quote to the speaker, the hummingbird, who is thereby the one who is in the state of both saying it, as in the picture, and having said it, since it is possibly a quote from a well-known hummingbird story.



Figure 240. Temporal deictic enclitic *-ijiiy* ∞ *-iiy* used when adding information about quoted statement.

²⁴³Note that the scene depicted under the enlarged text is on the opposite side of the vase from the enlarged text above it. However, except for the spoken text itself, it is very similar.

6.3.6 Distant Past

In the passages cited up to now, the temporal deictic enclitics *-ihi* ∞ *-i* and *-ijiiy* ∞ *-iiy* have been attached to verbal compounds whose pronominal clitics referenced events, people, places, and things mentioned earlier in the narrative or assumed to be generally known to the scribes and their audiences.²⁴⁴ This made it easier for the reader to comprehend the temporal relationships between both extranarrative and discourse-internal events. Such clauses, sentences, or passages added information about their referent, sometimes just about the difference in time between two events, at other times about the person who oversaw a particular event, where an event took place, or even who made a particular statement. Sometimes a known piece of information was used to identify an individual as the one who performed a particular act. At other times the individual seemed better known and the new information added to this knowledge. In some cases, sustaining the flow of the narrative or maintaining certain parallel discourse patterns seemed paramount. In others, the additional information itself seemed most important. In all of these contexts, the temporal enclitics served as directional indicators for discourse external or internal time, namely “earlier, in the past, ago, after.”

There is another context in which this directional quality seems at first to be lacking although the same enclitics are employed. Instead, the common element in these texts appears to be the considerable temporal distance between two sets of events being reported or between the time the text was written and the time the event took place. While it is often evident from information in the rest of the narrative that the reported event occurred in the distant past, it is the presence of the temporal deictic enclitic itself that confirms this distance. Other than the temporal deictic enclitic, no other deictic, such as a person marker, plays a direct role in this particular function. However, if there are distance numbers or other back references within the distant-past narrative, they will still play their usual roles.

²⁴⁴ Although I have given no examples here, these references can be and are also accomplished by means of independent pronouns in both the Classic Ch’olan and Acalan Chontal texts.

6.3.6.1 Distant Past in Acalan Chontal

The Acalan Chontal document uses the verb *b'ix*, a verb we have already seen used with the *-ihi* ∞ *-i* deictic enclitic in a referential clause adding additional information. There is also one example of this verb used in a distant-past context. First, compare the following two passages both containing a form of *b'ix*, one with and one without the past temporal deictic enclitic.

*Hain xach me ahau yuual **bixi** ta chactemal* (Paxbolon et al. 1614:156.14)

Now, this one was king then [when] **he traveled (went out)** to *Chactemal*.

***bixihiix** abi paxbolonacha ahau* (Paxbolon et al. 1614:160.20)

He traveled (went out) back then, it is said, the king Paxbolonacha.

In the first example, the verb for the event, the king's going away to Chactemal, takes only the completive aspect status marker *-i*. In the second, the verb takes the completive status marker but has the deictic enclitics *-ihi* and *-ix* attached as well.²⁴⁵ The use of the *-ihi* and the *-ix* enclitics separate the event further from the current time. Other than these clitics, only the presence of the word *ab'i*, "it is said," differentiates them. *Abi* also serves to indicate that someone other than the current writer, often an unknown or indefinite other, was the originator of the information upon which the report is based. As such, it is frequently used for reports that have been passed down over relatively long periods of time because these are often the events that could not be directly corroborated by the one currently giving the report. Its presence in these context, however, should not be construed as a requirement. While it is true that narrators sometimes try to distance themselves from reports of events they have not experienced themselves, they do not always do so even when they clearly could not have witnessed them.²⁴⁶

²⁴⁵ As will be argued later, the two *i*'s here provide strong evidence for the presence of both temporal deictic enclitics even though they are often merged in similar compounds.

²⁴⁶ *Abi* (*ab'i*) is often present when one or both of the two clitics are used in the context of a distant-
(continued...)

The next passage from the *Paxbolon-Maldonado Papers* shows that the past deictic enclitic can indicate distant past without the help of another indicator. It is also the first example provided in this study of its use with a positional verb in the Acalan Chontal document.

***chumvanihix** ta ahaulel paxtun uch'ochocal uppenel paxbolonacha tanix upectzil utakya yithoc yoça ha padreob **cahix** utuclabel upetelob aHauel baob yithoc belcah bixic uçacanob padre ta canpech **cahix** utalel ahau paxtun - yithoc ucuchulob uçacan padre ya ta canpech (Paxbolon et al. 1614:163.26-31)*

He was seated in reign (in the kingship) **back then**, Paxtun, the younger brother of the son of Paxbolonacha. During it [his reign] was their news and their preaching along with being made to enter the water by the Fathers (priests). **It began** the consulting of all the lords with the people about going to seek out the Fathers in Campeche. **It began** the going of the lord Paxtun with his seated ones (his council) to seek out the Fathers in Campeche.

The main verbs in this passage, in bold, have a temporal deictic enclitic attached. The first verb includes both *-ihi* (*-iji*) and *-ix* and the second two just *-ix*. There is no explicit reference from the current to a previous point in the narrative timeline nor to previously known history. Rather, the focus is upon events of a long time ago. The accession of *Paxtun* took place in about 1550 AD. This section of the *Paxbolon-Maldonado Papers* was originally written in about 1610 AD (cf. Scholes and Roys 1968:360-363; Smailus 1975:14). This passage is also very important for the claim to

²⁴⁶(...continued)
past sentence. This is the case, for example, in Paxbolon et al. 1614:156.19; 160.20; 160.30; 164.20) and elsewhere. But *ab'i* can also occur when the clitic is not present, for example in Paxbolon et al. 1614:155.18; 157.30; 162.4) and elsewhere. So, although *ab'i*, whose basic meaning is something like “it is heard, one hears,” can cue distance of the event from the narrator or from the current point in the timeline, it operates independently of the temporal deictic enclitics. Its presence is a useful tool for the translation because without such a word, it may be more difficult to express in English what is supplied by the temporal deictic enclitic *-ihi-* ∞ *i* in distant-past contexts. Its meaning and connotation in such contexts in Acalan Chontal are, however, quite clear. I have usually translated it in these contexts as “back then.”

legitimacy by the author as the rightful heir to the leadership of the Acalan Chontal people “to establish the hereditary rights of Martin Maldonado, his son . . . and to support his own claim to a grant of *encomienda*” (Scholes and Roys 1968:292). This was the time when the ruler and many of the people converted to Christianity. So, it was in the interest of the writer to emphasize the time distance between the time of writing and when the events took place to strengthen his case. But just as important may be that this whole section “appears to be based very largely on oral tradition” (Scholes and Roys 1968:363) which is a type of report for which the temporal deictic enclitics *-ihi* ∞ *-i* or *-ix* are often used in Colonial and Modern Ch’olan languages.

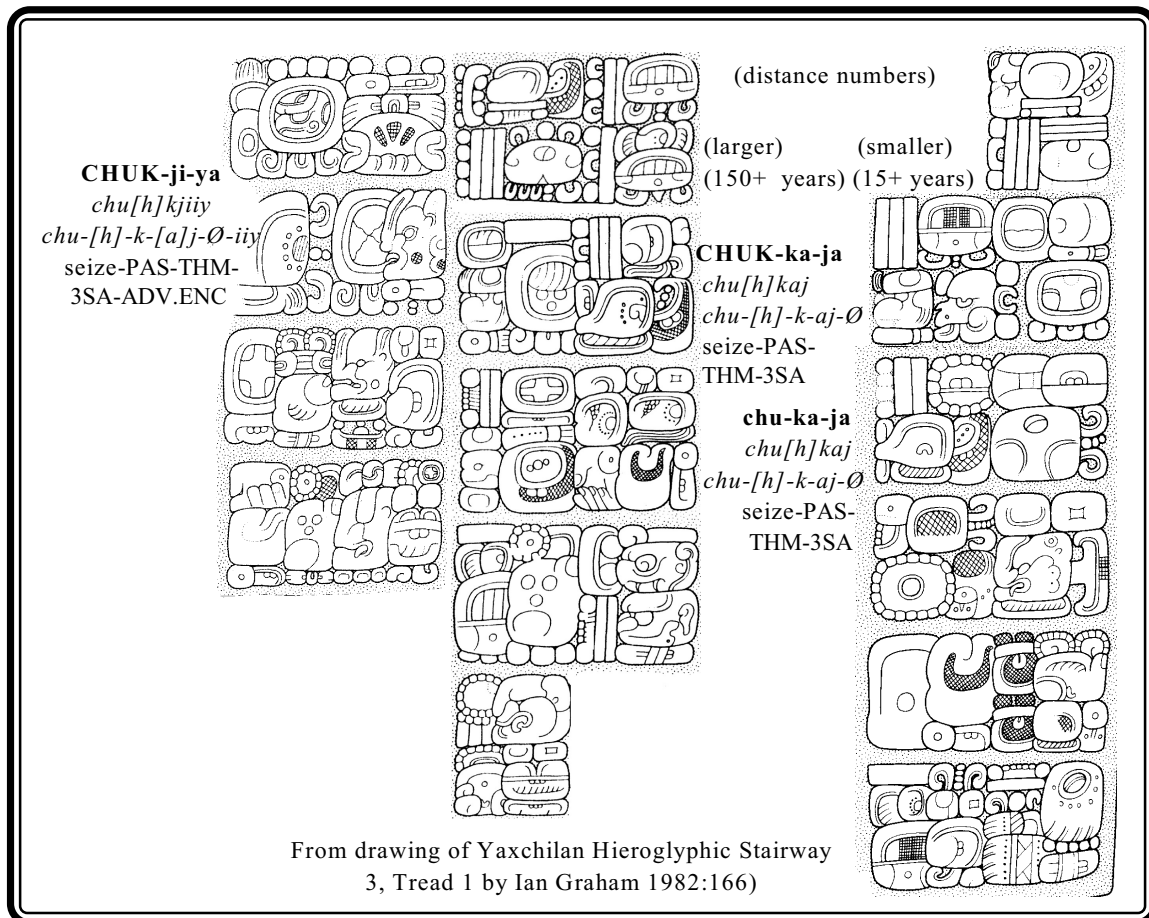


Figure 241. Temporal deictic enclitic *-ijiiy* ∞ *-iiy* indicating occurrence of event in distant past

6.3.6.2 Distant Past in Classic Ch'olan

6.3.6.2.1 Historical Time

The temporal deictic clitic *-ijiiy* ∞ *-iiy* is also used in distant-past contexts in the Classic-Period inscriptions. One of them is in the passage from Yaxchilan in Figure 241 which contains more information about the *Itzamnaaj B'ahlam* ancestor alluded to on Lintel 46 in Figure 235. The transcription and translation of the first part of the text is:

*ti chan men(?) ux te' mak **chuhkjiiy** etz'naahb' suutz' k'an tok luk xukalan ajaw
yehte' ch'aho'm joy b'ahlam k'uh(ul) pa' chan ajaw*

On 4 Men(?) 3 Mak, **he was captured back then**, Flint Bat, Yellow ??,
“*Lakanha*” Lord. It was the work of the incenser?/warrior? Joy B'ahlam
(“Encircling Jaguar”), holy “Yaxchilan” Lord.

This passage is followed by two others telling of captures by *Itzamnaaj B'ahlam*, the first of which is over 150 years later. The first instance of the verb root *chuk* is derived as a passive and has the *-iiy* enclitic attached resulting in *chuhkjiiy*. The other two instances later in the text do not. They are spelled instead **CHUK-ka-ja** which results in the transcription *chuhkaj* rather than *chuhkjiiy* as in the first passage which reports the much earlier capture by Joy B'ahlam. So, just as in the Acalan Chontal document, the scribe presents an event as having happened in the distant past by attaching the past temporal deictic enclitic to the main verb in the sentences. While all three captures are reported in succession in the narrative, only the first includes an indication that it occurred in the distant past. For this scribe, that earlier time may be viewed as a different epoch or at least as a time not directly experienced. Among other triggers, such a shift to a different time frame can prompt the use of the past temporal deictic enclitic.

It is easier to predict when the temporal deictic clitic *-ijiiy* ∞ *-iiy* will be attached to verbs in referential clauses, especially in distance number contexts, than to those in distant-past contexts. In referential contexts, it is the back-reference itself and not the

amount of elapsed time or the author's relationship to the information that promotes the enclitic's presence. In some cases, a reference back to an earlier event on the way to the mention of a later one makes its appearance more likely. In others, the mention of additional information causes the writer and reader to reposition themselves temporally within the narrative, again creating an opportune time for the enclitic. From each new standpoint, the previous one is in the narrative past, and it is the temporal deictic enclitic which explicitly acknowledges that. This is not true when it is used for narrating distant-past events.

Since there are no explicit back references motivating the presence of the temporal enclitic in distant past contexts, syntax is not a major factor. Other than possible clues such as *abi* (*ab'i*) in Chontal or much older dates in Classic Ch'olan, there is nothing else within the narrative flow that gives a clear indication of one's temporal standpoint. Instead, the narrator is often working with a temporal measurement external to, or at least not immediately explicit in, the narrative. It is the narrator's own unstated temporal framework which determines whether the events being recounted took place in a different time frame. In fact, it is the whole primary narrative timeline that shifts to the distant past. The narrator is often using a temporal measurement external to or only implicit in the narrative.

If it is true that pronominal reference is not involved in distant-past contexts, how can it be that deixis is involved at all? Is it not true that the very concept of deixis involves at least two positions, with the pointing originating from one position and signaling or moving toward another? The answer is that there is still a deictic function here but the point of origin is both external to the narrative and not explicitly acknowledged within it. This usage in distant past contexts is related to a feature of deixis mentioned by Schiffrin (1987:322-323):

Deictic elements define the **deictic center** of an utterance, i.e. the locus from which speaker, hearer, time, and place coordinates are fixed, and are thus assigned

a context-specific interpretation. In unmarked cases, the deictic center is the speaker, such that person, time, and place are defined in relationship to the speaker's identity, the time during which the utterance is presented, and the location of the speaker.

In distant-past contexts, the deictic center or point of origin is unmarked. There is no specific marking, other than the enclitic itself to set up the deictic relationship. In other words, there is no pronoun referring back to a previously mentioned event, person, or thing. Also, the verbs reporting the events are marked by the enclitic in their first recounting. But when one realizes that the scribe or the commissioner is the “deictic center” in relation to whom the temporal position is defined, the usage of the past enclitic is both justified and imbued with meaning.

Now is an opportune time to compare the distant-past usage of the adverbial enclitic here to the definitions of “taxis” and “relative tense” offered by Maslov (1988) and Comrie (1985) respectively. The issues of tense and taxis will be addressed in more detail later in Section 7.2.4. However, a few comments here may help to clarify how the past enclitic functions in distant-past contexts and why it is something other than verbal inflection. Since “taxis” as defined by Maslov involves the relationship of an event with another event rather than with the deictic center of the present narrative moment, the situation present here in distant-past contexts would be closer to “tense” than to taxis. Comrie differentiates “relative tense” from “absolute tense” based upon whether the relationship is between two different events or between an event and the present narrative moment. So, as soon as the present narrative moment enters the picture, one is referring to absolute tense rather than relative tense – although this is not always clearly stated by Comrie. However, it is important to note that the past temporal enclitic can be used in both contexts. If it were verbal inflection, it would have to serve as both tense and taxis, absolute tense and relative tense, thereby blurring a distinction which otherwise has been widely accepted as valid. As an adverb, on the contrary, the past temporal enclitic can

function in either context because, as an ungrammaticalized lexeme, it can more easily carry a broader range of meaning than a grammaticalized morpheme.

There is also another problem that arises from the Figure 241 passages in attempting to explain the *-iiy* enclitic as verbal inflection. Although at least the first two passages appear to be in the narrative past, only the verb in the first passage has *-iiy* attached. There are, to be sure, languages that have different inflection for the recent past and the more distant past. However, no one has suggested that Classic Ch'olan or any of the Ch'olan languages employs inflection that makes such a distinction. What is more, the second and third verbs here in this Yaxchilan narrative, and indeed most of the verbs in the Classic inscriptions, would be employing the recent past inflection if that were true. What is more likely, is that all three of these events are reported as past or historical events especially considering that they are all accompanied by specific dates and not overtly represented as future predictions. The main differences are instead the relative length of time that the events are removed from the time of their actual reporting and the likelihood of the writer's or commissioner's intimacy with the actual captures being reported.

Because the prerequisite for using the enclitic in distant past situations is not syntactic but rather semantic, a great amount of latitude is allowed in determining the size of the required shift in time that makes use of the temporal deictic enclitic appropriate. In fact, the criteria may have as much to do with motive and purpose as with any abstract temporal measurement. In the Acalan Chontal passages, recalling critical events from sixty years ago along and using narrative history gathered from witnesses was enough for its application. In the passage from Yaxchilan Hieroglyphic Stairway 3, the first capture by *Itzamnaaj B'ahlam*, over fifteen years before the second, was not far enough in the past nor far enough removed from the narrator's experience, but the earlier capture by *Joy B'ahlam* was. Of course, it was really not just a matter of a certain amount of time, not merely a question of 15 versus 165 years. It also had to do with the handing down of information by elders, by oral tradition, or by written reports instead of events personally

experienced. Beyond even that, it was also the historian's way to associate two captures of the current ruler with a capture by his ancestor from a different era. It is also this qualitative difference in time that was expressed by using the temporal deictic enclitic in this context.

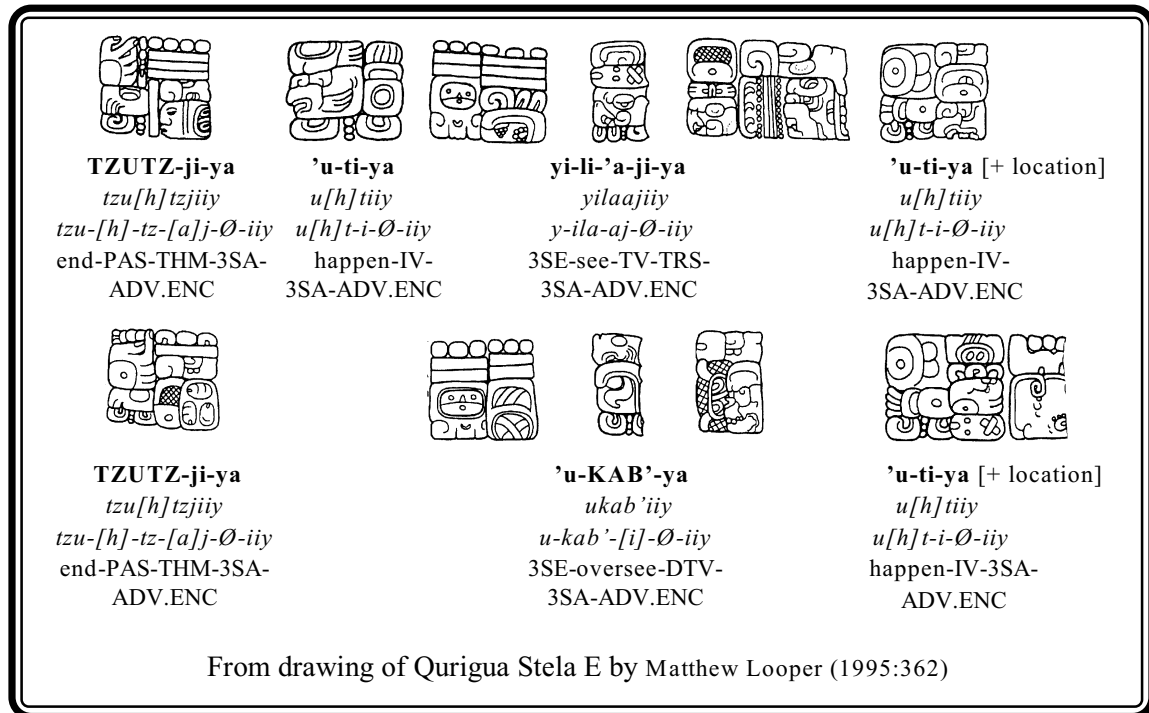


Figure 242. Parallel passages on Quirigua Stela E using past temporal enclitic *-ijiiy* ∞ *-iiy* in narrating events in very distant past

6.3.6.2.2 “Mythological” Time²⁴⁷

The temporal deictic enclitic can serve to indicate a temporal horizon that stretches back to the beginning of a ruler's reign as in the *Paxbolon-Maldonado Papers* or to the rule of an ancestor who lived over 165 years earlier as on Hieroglyphic Stairway 3 at Yaxchilan. Would it not be even more appropriate when recounting events that happened prior to the current calendrical era, that is, before the first year in the current

²⁴⁷ Note that the term “mythological” time here should be taken only in a descriptive sense based upon the relative distance back into the past. As Nora England (pers. com. 2007) notes, there seems to be little evidence among current Mayan language speakers that they express themselves differently when addressing a “historical” versus a “mythological” past.

long-count “*B’aktun*” cycle? The passage from Quirigua Stela E in Figure 242 reaches back even further deep into the so-called “mythological” past. Prior to the passages illustrated, the inscription starts in “historical” time with the setting up of a stela on 9.17.0.0.0 (January 18, A.D. 771). The narrative then continues, as seen here, with a form of the verb *tzutz* and a collocation with the number nineteen above what is likely a large time period or cycle. It is critical to note that the suffix on the verb is not simply that of the thematic or intransitivizer *-aj* which accompanies the passive. It is not enough to indicate that its subject, the time period, has been completed. The presence of the temporal deictic clitic indicates that this large period ending, of which it is the nineteenth, was completed sometime in the distant past, *tzuhztzjiy b’olonlaju’n ho’su(?) naal*, “It was completed back then, the 19th [time period?]. It is clear that the author would not have personally experienced it, so the deictic enclitic here reflects both that mediation and the extreme temporal remove of the event itself.

Another clear indication of the distant past is the form of the next verb *uht* “to happen.” It is often used similarly to lead into a Calendar-Round date, “and then it came to be.” But normally the form is *’u-ti* and not *’u-ti-ya* in these circumstances. The difference here is the otherwise unexpected presence of the temporal deictic enclitic, making it *uhtiiy* instead. Note that the referent of the absolutive dependent pronoun *-Ø* is not a previous or earlier event but rather the calendar-round date that follows. It does not set up a back-reference here at all. Instead, the presence of the past enclitic here indicates the same distant-past perspective that motivates its presence on the previous verbal compound *tzuhztzjiy*. This Calendar-Round date occurred in the distant past as well and the scribe surely did not witness it. It is in the same time frame as the previous verb and so it too takes place in the same “mythological” past.

The second passage is parallel to the first. It begins with the same verb *tzuhztzjiy* which includes the temporal deictic enclitic. What is completed, its subject, is another large time period with the coefficient of six. *Uhtiiy* is not present to lead into the calendar-round date and no other verb takes its place, which is not unusual. Calendar-

Round dates occur throughout the inscriptions, both with and without the verb *uhti* introducing them, with no apparent difference in meaning.

The form of the last verbal compound in each of these two passages would be the same even without the distant-past context. They introduce locative sentences that refer to the events in the previous portions of the passages just as in the examples we looked at earlier. In this case the sentence reads *uhtiiy lonal*, “it happened at *lonal*.” The additional information it adds is where the event took place. The same is true of the parallel passage which ends in *uhtiiy yax k'al hunal witz*, “it happened at the first-headband-tying mountain.”

The preceding sentence maintains, in each case, the parallel construction of the two passages. Looking at the second passage first, we see that it provides another example of a common derived transitive verbal compound we have already discussed, *ukab'iiy mixnaal*, “*mixnaal* oversaw it.” The parallel sentence in the first passage is *yilajiiy ik' ma's(?) tzuknaal*, “the black ? partition *nal* took care of it” (or “witnessed it”).²⁴⁸ Both of these verbal compounds represent transitive constructions along with the temporal deictic enclitic *-iiy*. In each case, the absolutive dependent pronoun is unmarked but still represents the direct object. The referent in each case, what is being “overseen,” is the completion of the high-numbered period ending. As is usual with both of these verbs, the referent is an event mentioned earlier in the text. However, while *ukab'i* often, although not always, has the temporal deictic enclitic unequivocally attached, the verbal compound *yilaj* (or *yilaaj*) does not. In other words, it is often written **yi-la-ji** or **yi-'IL-ji** but not **yi-li-'a-ji-ya** as here where the attached enclitic can be transcribed as *-iiy*. That suggests that the attachment of the enclitic here may be due to the distant-past context rather than the back reference. While *yilaaj* is often used in circumstances similar to *ukab'i* and incorporates similar back referencing in these contexts, the *yilaaj* compound is only rarely found with a final **ya** glyphic suffix.

²⁴⁸Morán (1935a:4) provides as a translation of *inu ilia inu ilohel*, the Spanish equivalent of “what it is my duty to see or take care of.”

The term “distant past” has been used here to refer to events taking place in a different time frame. The use of the adjective “distant” here is convenient but somewhat misleading. Although *-ijiiy* ∞ *-iiy* and *-ihi* ∞ *-i* (in Acalan Chontal) are more likely to occur with events that have happened in the relatively far-removed past, it is clear that the motivating factor is not merely one of quantity but also one of outlook or perspective. It is not just the measure of sequential time that is the deciding factor but rather the way the time difference is interpreted by the narrator that is crucial. Whether the verbs to which the temporal deictic enclitic are attached report events that take place in the very distant past, as in the example from Quirigua, or not as far in the past, as in the examples from Yaxchilan and the Acalan Chontal document, it is the narrative posture that is the critical element. Not having directly or even indirectly experienced the events being reported also seems to play a large role in the decision to employ the temporal deictic enclitics in these contexts.

We have seen the major functional differences between the referential and distant-past usages of the temporal deictic enclitic *-ijiiy* ∞ *-iiy*. There are major differences in their implications as well. The referential examples are more interesting for grasping the grammar and narrative style employed by the scribes. Understanding how the pronominal and temporal enclitics function is necessary for a basic comprehension of the author’s message and for appreciating the literary skill that produced it. While important for establishing the order and temporal flow of the narrative when used with referential clauses, the deictic clitic becomes an even more powerful and flexible device for demarcating distant-past events. It is flexible, because the appropriate interval between events completed in the recent and distant past is determined not by an abstract rule but by the intent, viewpoint, and experience of the narrator. It can aid in the discovery of the message the author or commissioner wished to import and even provide additional insight into the historical, religious, and ideological strategies of the commissioners and authors.

6.4 Forms of Past Temporal Deictic Enclitic in Acalan Chontal²⁴⁹

6.4.1 Smailus' Interpretation of Past Temporal Enclitic

The examples from the *Paxbolon-Maldonado Papers* already presented in context are clearly the strongest evidence for the presence of the temporal deictic enclitic *-ihi* ∞ *-i* in Acalan Chontal. Comparing this Colonial text with passages from the Classic-Period texts has revealed reflexes of the same forms being used in strikingly similar passages. The combined evidence based upon both form and usage has strengthened this identification. Further evidence has come from comparisons with data from both current and colonial Ch'olan languages. Still, despite the general availability of this data, the past temporal deictic enclitic had not been recognized or acknowledged as such on verbs in any of the detailed studies of the Acalan Chontal document until I proposed it in March 1997 (cf. Wald 1998a, 1998b). Several examples of how both Smailus (1975) and Scholes and Roys (1967) have ignored or mistranslated verbs with the *-ihi* ∞ *-i* enclitic attached have already been presented. This situation may have been created by their misidentification of the relevant morpheme as detailed in the following description by Smailus.

El sufijo demostrativo expresa que el sujeto de la acción ejecutada in la posición 4, o la acción misma, ya ha sido mencionada. Este sufijo se puede traducir, en el caso de hacerlo, como “este mismo”.

Ejemplo: 155:31 bolonlamat terminos uthanceli “Bolonlamat, el
cual se llama Terminos”

156:3 acathanihi “. . . como yo *ya* dije” (Smailus 1975:203)

²⁴⁹Note that a somewhat different version of this section has already been published elsewhere (Wald 2004b). An updated version is included here for several reasons. First, the earlier version was originally written as a result of the research for this dissertation. Second, several important modifications have been made to that version of the text. Third, this present study would otherwise lack the mention of important analytical details concerning the temporal deictic enclitic *-ihi* ∞ *-i* in Acalan Chontal.

The demonstrative suffix indicates that the subject of the action executed in position 4, or the action itself, has already been mentioned. This suffix can be translated, in case one does so at all, as “this very one.”

Example: 155:31 *bolonlamat termino uthanceli* “Nine

Lamat, the one called Terminos”

156:3 *acathanihi* “. . . as I *already* said”²⁵⁰

Although Smailus’ translation of these two passages agrees roughly with that which I have already provided for similar passages, his interpretation of the role the enclitic *-ihi* ∞ *-i* plays in them does not. He does not interpret it as an indicator of the temporal direction between the pronoun in the current clause and its referent in another. Instead, he seems to interpret it specifically as a demonstrative pronoun equivalent to “this” or “that which” in English. Thus he states that, if it is to be translated at all, it can be rendered as “this very one” (“*este mismo*”). He calls it a demonstrative suffix that actually creates the referential connection to the previous action instead of analyzing it as an adverbial indicator of the temporal direction of that previous action’s location in the narrative, as I have in this study. He also seems to limit the meaning to its usage with this particular verb or verbs with a similar meaning.²⁵¹ That he may be doing so is also indicated by his entry for this enclitic in his accompanying lexicon.

-hi Sufijo demostrativo:

“esto, lo referido” (Smailus 1975:142)

²⁵⁰Note that in a previous essay (Wald 2004b), I translated this with the English present perfect due to the presence of “*ya*” “already.” However, the Spanish clearly has the preterit and not the perfect. Since some had taken those translations into the English present perfect as indications that they represent the presence of the perfect in the source language, I have taken care to provide a more literal translation here and elsewhere in this study. As will soon be explained, the original Acalan Chontal also does not include an exact equivalent of Spanish “*ya*” or English “already.” Instead, it is rather much closer to “I just said it earlier.” This will be explained further in what follows.

²⁵¹There is one instance of a similar verb, also a derived transitive, which has a similar meaning: *Vucdzac Don Pablo Paxbolonacha governador valelay uppenel alamatazel acadzibihi* (Paxbolon et al. 1614:157.1-3). “The seventh in line was Don Pablo *Paxbolonacha*, the ruler/governor now, the son of *Alamatazel*. **I just wrote it earlier.**”

-*hi* demonstrative suffix:
“that; what has been referred to”

As has already been noted, the role Smailus assigns to the enclitic *-ihi* ∞ *-i* in these and its many other occurrences in this document is already being played by the Acalan Chontal person markers, those dependent pronouns which, unlike the English and Spanish personal pronouns, are required even when the nominal subjects or objects are present. In the occurrences of the compound *acathanihi*, it is the third-person-singular unmarked or null absolutive (“Set B”) pronoun which points to the otherwise immediately unexpressed object. In passages such as these, the null person marker *-Ø*, as direct object, points to **what** is referred to, the referent. The deictic enclitic *-ihi* indicates the referent’s **relative temporal position**, that is, “earlier” compared to the current standpoint in the discourse. This meaning of “earlier” puts it right in line with the same enclitic in Classic Ch’olan, which also includes the English equivalent “earlier” as one of its basic adverbial meanings.

Because the temporal deictic enclitic *-ihi* ∞ *-i* is used very often in the *Paxbolon-Maldonado Papers* with verbs that refer explicitly to earlier passages in the document, Smailus’ definition of its meaning might seem to roughly fit based upon a cursory examination. But several of the other occurrences that have already been examined in the comparisons with parallel passages in the Classic-Period texts would not fit Smailus’ interpretation. Perhaps that is partly the reason why he ignores this enclitic in his translation of some of those other passages and may have prompted the occasional omission of some of the verb compounds themselves. I have already noted how Smailus, along with Scholes and Roys before him, also often ignored this enclitic when used with other verbs (see Section 6.3.1.2). This particular verb, *than* (*t’an*), with its *-ihi* (*-iji*) enclitic and first-person-singular form provides a distinctive parenthetical expression which comes in the form of the Chontal author’s explicit references to the text already written. He refers to himself as the author in the first-person. First-person references,

much less first-person references to themselves by scribes, are infrequent in the Classic-Period inscriptions. It is possible that the near absence of such self-references in the inscriptions, the analyses and translation of the *-ihi* enclitic as provided by Smailus and Scholes and Roys, and the supplanting of the *-ihi* enclitic by other morphemes in Chontal and other Ch'olan languages have made it more difficult to recognize the parallel usage of this deictic enclitic on verbs in the Classic-Period texts.

6.4.2 Contrasting Homophonic Suffixes in *Paxbolon-Maldonado Papers*

6.4.2.1 Demonstrative pronoun *-i*

I have just argued that the temporal deictic enclitic in Acalan Chontal has been misinterpreted as a demonstrative pronoun. But there is also a danger of the opposite happening, that certain similar suffixes might be interpreted as the past temporal deictic enclitic.

One morpheme that is phonetically similar to the short form of the past deictic enclitic in the *Paxbolon-Maldonado Papers* is the demonstrative pronoun *-i*. It means “this” or “this one” and refers to something close to the speaker, similar to its English equivalent. It is the counterpart of *-ay* ∞ *-a* “that” or “that one” referring to something further away from the speaker.

coco xach col numicon cilan cab upeteli (Paxbolon et al. 1614:160.13-14; Smailus 1975:52)

My desire [is] only [that] I would pass by [for] my seeing **this** whole land.²⁵²

²⁵² Although it is not relevant to the point being made here, I have translated *cilan* here literally as a possessed gerund. In the *Paxbolon-Maldonado Papers*, the possessed nominals, which later became used more clearly as incompletives, often make more sense in context as the possessed nominalized verbs from which incompletives were ultimately derived. This situation will be discussed in more detail later because of its importance in evaluating the origin of the completive-incompletive distinction in Chontal and other Ch'olan languages.

A more colloquial translation might be, “Now then, I only want to pass through to see **this** whole land.” In this and several other passages, it is clearly the demonstrative pronoun “this” and not the past temporal deictic enclitic that is embodied in this *-i* suffix.²⁵³ It is perhaps noteworthy that although Smailus incorrectly identified the temporal deictic enclitic *-ihi* ∞ *-i* as a demonstrative pronoun, he never equated it with this particular demonstrative pronoun. What is more, when the temporal deictic enclitic is properly understood as an adverb indicating temporal direction, it becomes quite clear that this is quite different from a demonstrative pronoun that is one side of a “this” and “that” pair. If *-ihi* ∞ *-i* were serving that purpose, it would conflict with the information provided by the dependent pronouns in referential contexts. It is those dependent pronouns and not the temporal enclitic that point instead to the referent.

Yukatek provides strong evidence that this homophone for the short form of the past deictic enclitic *-i* is not related to it at all. The enclitic meaning “this” in Acalan Chontal is likely related directly to the enclitic *-i* in Yukatek, which has the same meaning (cf. Martinez Hernandez 1930:459 and Barrera Vásquez et al. 1980:261). But if this is true and it was not borrowed from Chontal into Yukatek, this Yukatek enclitic could not come from Proto-Mayan **-ej-eer*. Yukatek never made the change from /e/ to /i/ as did the Ch’olan languages. The reflexes of **-ej-eer* are still present in Yukatek and the vowels in compounds with this past deictic enclitic attached have **not** undergone a change from *e* to *i*. The Motul Dictionary lists *holhe* for “ayer” and *cab he* for “ante ayer” (Martinez Hernandez 1930:162, 396). The Cordemex Dictionary shows *ho’lhe’* for “ayer” along with *ka’bhe* for “*antier*,” *oxhe’* for “*tres días ha*,” and so on (Barrera Vásquez et al. 1980:226). It is quite evident that we are dealing here with two enclitics that are not only different in meaning but also have a totally different etymology. This

²⁵³ A few of these other passages are Paxbolon et al. 1614:155.15, 160.9, 162.19, 168.38). The occurrence of a final *-i* on words in these and other passages like them should also not be interpreted as having some sort of non-temporal directional meaning such as “here” or “there” either. This should be clear from looking at the first example from the list, *nadzon Juan Baptista escrivano vi ti cabi* which translated is “I, Juan Baptista, scribe here in this town.” There is already a word for “here” in this sentence, *vi*. Neither a repetition of “here” nor a nonsensical “there” would fit. Instead, what he is writing makes perfect sense, that is, *vi ti cabi* “here in **this** town.”

comparative etymological history provides solid evidence that the *-i* meaning “this” or “this one” in Chontal is not the same *-i* as that meaning “ago, earlier, then, back then.”

6.4.2.2 Locational Adverb *-i*

There is another homophone that could be confused with the past deictic enclitic *-ihi* ∞ *-i*. It is an *-i* enclitic that means “there” and is used often on nouns following the preposition *ta*, as in this example:

uppenel pachimalahiix dzibil ukaba ta chani (Paxbolon et al. 1614:166.27-28)
he [was] the son of *Pachimalahix*. His name is written above/up **there** (literally, but used idiomatically, “in the sky **there**”).

This enclitic occurs often on names of towns that are also preceded by the preposition *ta*.²⁵⁴ The use of this enclitic is clearly connected with spatial contexts while *-ihi* ∞ *-i* is always connected with temporal ones. As with the other *-i* enclitic just mentioned, it too exists as *-i* in Yukatek with the same meaning it has in Acalan Chontal. Martinez Hernandez (1930:459) and Barrera Vásquez et al. (1980:261) provide “*allá, allí, de allí*” and other similar translations. Because the past temporal enclitic is *-eey* or *-ej-eey* in Yukatek while this locational adverb is *-i* in Yukatek, they cannot be the same morpheme. So all the evidence again points to a Proto-Mayan **-i* etymology for this Acalan Chontal reflex in *-i* with the same meaning and function. In both Yukatek and Acalan Chontal, this enclitic means “there” and is etymologically unrelated to the temporal deictic enclitic which has been the focus of this present study.

6.4.2.3 Completive Suffix *-i*

Another obvious homophone is the completive suffix *-i* used on many verbs in the *Paxbolon-Maldonado Papers* as, for example, on the verb *b'ixi* in:

²⁵⁴Some of these other occurrences are Paxbolon et al. 1614:164.5, 166.2, 167.8).

yuual bixi paxbolonacha ahau tu hunppel cah ukaba tachacan. (Paxbolon et al. 1614:162.11-12)

then he went, the king *Paxbolonacha*, to one town named *Tachakan*.

If one considers the *-i* completive suffix on *b'ixi* in isolation from the completive suffixes on the stems of other verb classes, it is easy to assume that it is related to the *-i* suffix that occurs on intransitive roots in Ch'ol and, to a very limited degree, in Ch'olti'. What is more, evidence of the antiquity of this suffix as a marker of root intransitive verbs is reinforced by its presence on root intransitive verbs in Classic Ch'olan. Although neither Tzeltal nor Tzotzil attest an *-i* marker on intransitive verbs, it or *-ik* is present on root intransitives in enough other Mayan languages, including Yukatek and Mopan, for Kaufman to reconstruct it for Proto-Mayan (Kaufman and Norman 1984:92 and Kaufman 1989:§3.p8).

However, it is inappropriate and very misleading to consider the *-i* completive marker on root intransitive verbs in isolation from the completive marker on other verb classes in Acalan Chontal. Indeed, *-i* inflects for the completive on almost all classes of verbs in both Colonial and Modern Chontal. In Acalan Chontal, even root transitive verbs carry an *-i* suffix to mark the completive. If one were to argue that this completive marker is related to the Proto-Mayan root intransitive plain status marker, one must also accept that it then spread as a completive marker to all other verb classes. For this to be so, it likely would have had to first lose its character as a root intransitive marker. But if so, it could no longer be a marker for root intransitives since it would now appear on all verbs. Also, since it would only appear on root intransitives in the completive, its property as a marker of root intransitives would no longer exist.

This state of affairs in Chontal is most confusing if one considers the reconstructed Proto-Ch'olan **-i* suffix to be both an intransitive marker and a completive suffix at the same time. By doing so, one is also assuming that distinguishing

incompletive and completive aspect by means of morphological suffixes is of greater antiquity than the evidence warrants. The topic of incompletive and completive aspectual suffixes will be taken up again later in another context. For now, it will only be suggested that if one views Chontal in isolation from the other Ch'olan languages, there is no internal evidence that the *-i* on *b'ixi* represents anything other than the completive. It surely does not, in Chontal, distinguish root intransitive verbs from any other class of verbs. In fact, it does not even distinguish intransitive verbs from transitive verbs. Already in Acalan Chontal, it is no longer indicative of intransitive verbs at all. Because this is so, it may also not be correct to look for the source of this completive marker in a possible Colonial reflex of the Proto-Mayan ***-(i)(k)* plain intransitive status marker. In other words, unlike its Western Ch'olan counterpart Ch'ol, the evidence points toward Chontal not using *-i* as a root intransitive marker.

Suffixes that spread to all classes of verbs in a language are often based upon words such as particles, clitics, adverbs, or even other verbs (cf. Bybee et al. 1994:9-12; Hopper and Traugott 2003:6-7, 140ff.). Similar patterns are also attested in the modern Mayan languages (cf. Kaufman 1989). The process of grammaticalization of such forms will be addressed in more detail later in Section 7.2.2. For now it will be noted only that such usage is most often attended by a change in meaning, usage, and form. Sometimes these changes in meaning are slight and at other times more substantial. Physical shape may be preserved at first, but then often changes over time. Its usage or function does indeed change, since that is what clearly or logically differentiates it from its ungrammaticalized counterpart and establishes it as a separate form in the first place. Often, but not always, the source particle, enclitic, or independent word still exists as its former self in the language and the rules governing its use in those contexts may not have changed at all. Speakers may often not be aware of the relationship between what are now two different words unless they reflect upon its similar shape.

One grammaticalized verbal construction that is similar in both English and Spanish is formed from the verbs “to go” and “ir” respectively, and used in both

languages as a future auxiliary. For example, in the sentences “I’m going to win” and “Voy a ganar,” the original meaning of physical or at least figurative movement from one place to another is no longer present. The connotation is simply that something will happen at a future time. That this analysis is correct, is further evidenced by the sentences “I’m going to go” and “Voy a ir” in which the verb “to go” or “ir” must appear along with “going” or “voy” in order to provide the connotation of actual physical movement. In the case of the English example, the word has even changed its form in colloquial speech. Instead of “going to,” one more often hears “gonna,” as in “I’m gonna do it.” Indeed, this usage is so common that the American Heritage Dictionary (2000) now includes an entry for it “**gon·na** *Informal* Contraction of *going to*: *We’re gonna win today*.²⁵⁵

Critical for comparing these examples from English and Spanish with the completive suffix in Chontal, is that the usage, the meaning, and, in the case of English, even the form of the original source morpheme has changed. Yet detailed analysis can often reveal the likely source, especially when both the newly grammaticalized form and the original can still appear in the same sentence, each with a different function and meaning. With all this in mind, I suggest that it is very possibly the enclitic *-ihi* ∞ *-i* that served as the source of the completive aspect suffix in Acalan Chontal.²⁵⁶

There are indeed several lines of evidence that converge to move the hypothesis that the Chontal completive aspect inflection originated with the past temporal enclitic *-iiy* from the realm of possibility to likelihood. The most obvious one is that the form is similar. The form *-i* is indeed one of the two forms that the enclitic can take on verbs in Acalan Chontal although it more often takes the longer form *-ihi*. Another important

²⁵⁵ A search of the word “gonna” in the daily Austin American Statesman newspaper turned up 122 examples of its use between July and October of 2005. Many of the examples were from quotes but some were not and some even occurred in non-quotational headlines. Some of the readers of this study may even recall parodied quotes from the former president George H. W. Bush in which the use of “gonna” was a foregone prerequisite for recognition of the impersonation.

²⁵⁶ Note that after I proposed the presence of the *-iiy* enclitic on verbs in March of 1997, Robertson et al. (2004) suggested that the enclitic is the historical source of a past-tense suffix on Classic Ch’olan verbs. I do not believe that this is the case for many reasons which will be presented in great detail later in Section 7.1.7.

factor is that while the intransitive marker was wedded to intransitive verbs, the enclitic could be attached to any verb whether root or derived, transitive or intransitive. This attribute seems not only to have carried over from the enclitic to the suffix, but rather to have made it more suited to the purpose. Finally, there are clearly semantic similarities between the completive aspect suffix and the past temporal adverbial enclitic.

However, despite the similarities, there are important differences as well. The behavior of the completive aspect marker is different precisely because it is a suffix and not an enclitic. As such, it no longer has a specific separate lexical meaning as does an enclitic, but rather performs a specific grammatical function only in conjunction with the verb. It is also true that the meaning of the completive-aspect suffix, referring to an action as a whole or complete, although similar in some ways to that of the adverbial enclitic meaning “earlier, ago, back then, in the past” is still quite different from it. Although they sometimes are both present in the same passages or even in the same sentences or words, neither plays the same role in them. The completive suffix, as its designation implies, indicates a view of the action expressed by the verb as complete. The enclitic, instead, performs different functions, none of which are the same as that of the completive suffix. As an adverbial enclitic, one of its functions is to indicate the direction of the temporal difference between the current statement and a previous mention of the same action or information. The completive suffix does not do so.

Nevertheless, although the adverbial enclitic remains the most likely candidate for the origin of the Chontal completive suffix, the proposals being made in this study concerning the use of that enclitic are not dependent upon that conclusion. Whatever its etymological source, Acalan Chontal uses the *-i* suffix to indicate completive aspect inflection on broad range of verb classes and is not at all limited to intransitives. Because Acalan Chontal no longer distinguished between long and short vowel forms except for the schwa *ä*, what would be a deciding factor for distinguishing the root-intransitive marker, which was short /i/ historically, from the short form of the enclitic whose /i/ vowel was long, is not available. This difference in length is not marked in the *Paxbolon-*

Maldonado Papers and was in all probability not present in the spoken language either by that time.

- a) *tali uyuxdzac ahauob ukaua chanpel upenel pachimal **acathanihi*** (Paxbolon et al. 1614:155.28-29)
He came, the third of the lords, his name *Chanpel*, the son of *Pachimal*. **I just mentioned him earlier.**
- b) *tali uchandzac aHau ukaua paxua upenel chanpel **acathanihi*** (Paxbolon et al. 1614:156.3)
He came, the fourth ruler in line. His name [was] *Paxua*, the son of *Chanpel*. **I just mentioned him earlier.**
- c) *chumvanix ta ahaulel macvaabin yidzin pachimalahix **acathanihi*** (Paxbolon et al. 1614:156.23-24)
He was seated in reign *Macvaabin*, the younger brother of *Pachimalahix*. **I just mentioned it earlier.**
- d) *hain aHau paxbolonacha **acathanihi** ayan uxtul uppenelob . . .* (Paxbolon et al. 1614:156.28-30)
This king, *Paxbolonacha*, **I just mentioned him earlier**, had three sons.
- e) *cahi uyithocbel paxbolonacha ahau **acathanihi*** (Paxbolon et al. 1614:159.24-25)
They began to join up [it began their joining up] with *Paxbolonacha*, the ruler. **I just mentioned him earlier.**
- f) *caix abi uthanbel tuba a paxbolonacha ahau **acathanihi*** (Paxbolon et al. 1614:160.32-33)
It began, it is said, his [*Cauauhtemoc*'s] speaking to him, *Paxbolonacha* the ruler. **I just mentioned him earlier.**
- g) *cha ta yuualix utaktzaythane quahtemuc ahau tali mexico **acathanihi*** (Paxbolon et al. 1614:161.12-13)
again then ["again and again"] it was the exhorting of *Cuauhtémoc*, the ruler who came from Mexico. **I just mentioned it earlier.**
- h) *unotemalix ukaba ppenlebil **acathanihi** akci ta maconib ta palib tamal chappel kin* (Paxbolon et al. 1614:162.23-25)
The largest in age(?) of the names of the sons, **I just mentioned him earlier**, was put into lockup in chains
- i) *hal xach hiliob chumuanib ya ta chanpoton **acathanihi*** (Paxbolon et al. 1614:162.32-3)
For a long time then they rested and they sat around in *Champton*. **I just mentioned it earlier.**
- j) *yaix checti upezelob unumibalob yithoc udzabilil ukakob **acathanihi*** (Paxbolon et al. 1614:168.22-23)
There then appeared [a] hut of their passing by/spending time with their lit fire, the fugitives, **I just mentioned them earlier.**

Figure 243. The ten occurrences of *acathanihi* in *Paxbolon-Maldonado Papers*

6.4.3 Variant Spellings of Past Deictic Enclitic *-ihi* ∞ *-i*

The scribes who wrote the *Paxbolon-Maldonado Papers* varied somewhat their spellings of the completive inflection plus temporal deictic enclitic even on the same compounds. All of the examples of the lexeme *acathanihi* are shown in Figure 243. It occurs ten times in exactly that form in the document.²⁵⁷ As already suggested in the preceding section, this spelling likely represents a merger between the *-i* completive inflection and the first *-i* of the enclitic *-ihi*.²⁵⁸ It is nevertheless, the longest form of the anterior enclitic that occurs on a verb in the Acalan Chontal Document.

It is important to note that, as is usual on verbs in Acalan Chontal, the *-i* suffix is present on all the examples of *acathanihi* in Figure 243 to indicate a completed action. Since the referred-to information was in each case provided earlier by the author, the completive aspect suffix is warranted. This suffix is not present in Classic Ch'olan, but is usually required in Chontal in such instances. The enclitic, *-(i)hi* however, plays the same role here. It indicates the direction of the referent's location in the discourse.

*vucdzac Don Pablo Paxbolonacha gobernador valelay uppenel alamatazel
acadzibihi* (Paxbolon et al. 1614:157.1-3)

el septimo don Pablo *Paxbolonacha* gobernador ahora su hijo *Alamatazel*
yo ya he dicho (Smailus 1975:34-35)

The seventh in line was Don Pablo *Paxbolonacha*, the ruler/governor now,
the son of *Alamatazel*. **I just wrote it earlier.**

Figure 244. Only occurrence of temporal enclitic *-(i)hi* on *tz'ib'* in Acalan Chontal document.

²⁵⁷For reasons unknown to me, both Robertson et al. (2004:288) and MacLeod (2004:307) state that there are only eight examples of *acathanihi* in the *Paxbolon-Maldonado Papers*. As I have already written in the same publication (Wald 2004:250), there are indeed ten in the facsimile of the extant handwritten text and in Smailus' printed text. In order to preclude any further disagreement on this purely empirical and factual point, I have included all of them in Figure 243.

²⁵⁸One could decide instead to include *-hi* as another variant of the enclitic, and such a variant, namely *-jiy*, appears to exist in Classic Ch'olan as well. However, I suggest that this possible variant here is better analyzed simply as a product of the merger of the two *i*'s. Note that MacLeod (2004:307-308) does not recognize this form as including the completive suffix *-i* at all, a conclusion with which I disagree for several reasons. Her proposal and my reasons for disagreeing will be discussed in detail later in Section 6.4.5.3.

Before going on to other forms of the past temporal enclitic, mention should be made of another verb with the enclitic used in precisely the same context and with the same shape as *acathanihi*, except for the root. The single occurrence of *acadzibihi* (*akatz'ib'iji*) in the Acalan Chontal document is shown in Figure 244. The difference is its root, which is based upon *dzib* (*tz'ib'*) “writing” instead of on *than* (*t'an*) “word.” Smailus’ translation is the same as for *acadzibihi*, but literally would be much closer to English “**I just wrote it earlier.**”

- a. *Tali chami doña ysauel acathaniy* (Paxbolon et al. 1614:157.19)
She came, she died, Doña Isabel. **I just mentioned her earlier.**
 - b. *cha hain macuaauay uchatulib acathaniy çutvani uane pudzel* (Paxbolon et al. 1614:162.3-4)
And this Macwaaway, the second one, **I just mentioned him earlier**, he returned, after(?) he fled .
 - c. *cha ta yuual xach ubixel padre acathaniy ani padre frai diego de bexar tuchalub* (Paxbolon et al. 1614:166.21-22)
And then [there was] the leaving of the father, **I just mentioned him earlier.** It was the father Fray Diego de Bexar.

Figure 245. *Acathaniy* variant of lexeme *acathanihi*

There is another spelling variant of the lexeme *acathanihi* that occurs three times in the document as shown in Figure 245. It is *acathaniy* (*akat'aniy*). The final *-i-y* of this form represents the completive aspect suffix and the short form of the enclitic. For that reason, I have translated the forms in Figure 245a-c as “I just mentioned her/him earlier.” The context and usage of both the completive aspect suffix and the short form of the temporal enclitic are here just the same as for the Figure 243a-j occurrences which employ the long form. It is theoretically possible to view this form as a result of the /h/ being elided after the merger of the completive inflectional suffix with the first *-i* of the enclitic *-ihi*.²⁵⁹ The elision of intervocalic *h*’s is a common feature of the Acalan Chontal

²⁵⁹This was the view I suggested concerning these spellings in an earlier essay (Wald 2004b:250).

script as it is of the spoken Ch'olan languages and of many other languages as well. For example, the word *cahi[i]x* is often written *caix* (as in Paxbolon et al. 1614:160.32) although the /h/ is actually part of the original verb root. This seems to happen only if it would otherwise not lead to misunderstandings, and, indeed, it would not in these occurrences.

However, using an Ockham's razor approach, I do not think that analyzing *acathaniy* as the result of the /h/ being elided is the only acceptable analysis of its form. The last portion of the compound enclitic *-ihi*, that is, *-i*, is perfectly capable of being used on its own without any additional mechanism to explain the absence of the *-h-*. The change of the final *-i* to a *-y*, that is, from a "vowel" to a "semiconsonant," is not at all controversial since it likely reflects only a change in orthography and not in pronunciation. There are several examples of just this variation throughout the Acalan Chontal document including one passage shown above which contains two examples (in Paxbolon et al. 1614:166.2-4 as shown in Section 6.3.4.2). One is *cayx*, clearly *ca-yx* from **cahix* and likely meant to be pronounced "ca-ix." Another, from the same passage but not involving the elision of an /h/, is *ymach*, surely divisible as *y-mach* and meant to be pronounced as "i-mach." Thus it is likely that the final *-iy* of the compound *acathaniy* is also likely meant by the writer to be pronounced /i-y/ (/i-i/) or perhaps simply /i/ as well.

The long form of the temporal enclitic is more frequent on verbs in the Acalan Chontal document than the short form. This situation is the opposite of that in Classic Ch'olan, although both forms occur on verbs in each language. Although only speculation, it is possible that the long form may be more common in Acalan Chontal because of the presence of the *-i* completive suffix. Using the long form makes the enclitic more noticeable than in these examples. Another factor may be that including the *-h-* in Acalan Chontal allows the writer to avoid juxtaposing two vowels, the occurrence of which is otherwise rare in all Mayan languages.²⁶⁰

²⁶⁰Of course, I find no reason to believe that the Acalan Chontal author was attempting to write a
(continued...)

- a) . . . *ta catel diego de aranda* ***acathani*** (Paxbolon et al. 1614:166.4)
 . . where he was staying, Diego de Aranda. **I just mentioned him.**
- b) . . . *tu 22 ukinil u julio* ***acathani*** (Paxbolon et al. 1614:167.10-11)
 . . . on the 22nd day of the month July. **I just mentioned it.**
- c) *francisco maldonado yithoc doña catalina* ***acathani*** *ani uppenelob martin maldonado* (Paxbolon et al. 1614:157.16-17)
 Francisco Maldonado joined with [married] Doña Catalina. **I just mentioned her.**
 There was a son, Martin Maldonado.

Figure 246. Only three occurrences of *acathani*

Finally, there are passages in which this word is written as *acathani* with just one *-i* following the root, the three occurrences of which can be seen in Figure 246. There are at least two ways these compounds could be analyzed. One would be to view the final *-i* on them as the result of a merger between the *-i* completive suffix and the short form of the enclitic, also *-i*. The merger of two adjacent *-i*'s in compounds is endemic throughout the *Paxbolon-Maldonado Papers*. It happens regularly, for example, on words that have the enclitic *-ix* attached as in the form *caix* for **cah-i-ix* (for example in Paxbolon et al. 1614:160.32) which has only one *-i* representing both the *-i* completive suffix and the *-i* vowel of the temporal enclitic *-ix*. Only occasionally do such compounds retain two *i*'s in the spelling of the *Paxbolon-Maldonado Papers*.

Another option would be to conclude that the past temporal deictic enclitic is not present here at all. Since it is not verbal derivation or inflection, its presence is not an absolute requirement for the basic meaning of the sentence to be preserved. The back reference would still be accomplished as always through the absolutive (Set B) person marker (here *-Ø*). The lack of the *-ihi* ∞ *-i* enclitic would make the temporal direction of

²⁶⁰(...continued)
 long /i/ vowel here. While this may be the case in some colonial documents written in Yukatek, there is no reason to believe that such a distinction between long and short vowels was present, other than a shwa (ä) versus a vowel of normal length.

the reference less explicit, but the reference itself would still stand. In fact, this is precisely the situation that obtains in the Classic Ch'olan texts. Often, the enclitic is present in certain contexts, for example, on the *ukab'jiiy* back reference statements noting who oversaw specific events. Still, there are other examples of *ukab'ij* alone inflected for the resultative without the enclitic. They still include the back reference created by the dependent pronoun, but do not have the additional indication of temporal direction that comes from the temporal enclitic.

Attempts to find critical contextual differences between the sentences using *acathani* and *acathanihi* have so far proved fruitless. Because *acathanihi* clearly includes the adverbial enclitic “earlier,” one might hypothesize a further remove between the current passage and its referent. If so, an analysis showing the distance between each of the occurrences and the referents of their dependent pronouns should provide some evidence for this. Since the division between sentences in the Acalan Chontal Document is somewhat arbitrary and shorter or longer sentences might skew the data, a count of text lines will be used instead. The occurrences of *acathani* in the three examples shown in Figure 246 are all within two to four lines of the referenced passages in the original text. Considering that the whole text is twenty-seven pages long with almost all pages containing between thirty-one to thirty-four lines, a back reference between two and four lines removed is quite close.

Next we turn to the examples of *acathaniy* with the short form of the temporal enclitic shown in Figure 245. In one case, the referenced text is just two lines removed and in another just five lines. There is one that is two pages, sixty-three lines, removed from the original occurrence of the dependent pronoun that references it. Although there is indeed one that is further removed, there are still two examples of the *acathaniy* set for which the distance of the referenced passage is very close as well.

Finally, turning to the ten examples of *acathanihi* in Table 243, the following removal distances are in evidence. Among these ten occurrences, five of them are within the same range as the *acathani* occurrences, that is, from two to four lines between the

occurrence and the pronominal referent. If one includes the *acadzibihi* example here, the ratio becomes six out of eleven with removal distances of four lines or fewer. Next, there are four *acathanihi* occurrences for which the removal distance is six to thirteen lines. This is still a relatively short removal distance and not likely indicative of a basic difference between the function of *acathani* and *acathanihi*. There is one passage for which the distance back from *acathanihi* to the referent of its absolutive pronoun is 1.5 pages or forty-seven lines. In sum, these data do not likely provide any trustworthy evidence of a formal difference among the various forms related to the distance between the absolutive pronoun and its referent.

Despite the evidence that all these forms can be used in the same context, it is nevertheless more than likely that *acathani* does not have the past deictic enclitic attached. Instead, the final *-i* is most likely simply the completive aspect inflectional suffix. It is with that in mind that the examples in Figure 246 have been translated as “I just mentioned her/him/it,” leaving out the adverb “earlier” which is otherwise provided by the past temporal enclitic.

What the evidence from the forms and the contexts implies is that a back reference can be made both with and without the presence of the past adverbial enclitic. Just as in comparable Classic Period texts, the use of the temporal deictic enclitic *-ihi* ∞ *-i* is not a required element in the Acalan Chontal text. Its presence and absence in them changes neither the basic meaning nor the tense or aspect of the verb. It is, after all, the dependent pronoun and not the temporal enclitic which makes the actual reference. Nevertheless, the temporal enclitic does serve an important role in both clarifying the direction of the dependent pronoun’s referent and in aiding and enhancing the flow of the discourse.

*Ukal namach chukaba ya yuuala ubanel dzaiccubelob ynta namachob
chan tzucul cab **acathane*** (Paxbolon et al. 1614:159:28-29)

Como no había nada, no lo hubiera informado a los cuatro barrios del
pueblo que nombré. (Smailus 1975:49.1-2)

Since there [would be] indeed nothing then unless they would be informed,
the four town barrios. **I just mentioned them.**

Figure 247. One occurrence of *acathane*

There is one final variant of *acathan-* that has not yet been addressed . It is shown in Figure 247. An example of the incompletive *uthane* has already been presented in Figure 234 above. This form of the incompletive for the root *t'an* is itself unusual. Although it is a derived and not a root intransitive, the author of the Acalan Chontal document forms the incompletive with a suffix that is normally found on root transitives instead: *-e*. In Modern Chontal, the incompletive of root transitives is marked by an *-e'* suffix (cf. Knowles 1984:72). This is probably the same suffix as in Acalan without the glottal stop consonant being specifically written.

Because *t'an* is a noun root in Chontal, it instead has to be derived as a transitive in order to function as a verb. In modern Chontal, the incompletive form of this verb is *t'anän* (cf. Knowles 1984:469). Knowing that the incompletive forms of most derived intransitives take a final *-n* in both Chontal and Ch'ol, one might wish to simply conclude that it must be *ä* that derives *t'an* as a transitive verb. That would likely be true for Ch'ol (cf. Warkentin and Scott 1980:69). However, as noted by Kaufman and Norman (1984:97), Chontal seems to have “reanalyzed the lexical stems of derived transitives as ending in consonants. . . .” So as a result of this reanalysis “the vowels in suffixes to derived stems belong to suffixes rather than to the stems themselves.” Thus, in modern Chontal, the stem is viewed as *t'an* and the incompletive suffix as *-än*.

Despite this problematic reinterpretation of these derivational suffixes, one would still expect a final *-n* instead of *-e* on the incomplete form *uthane* in Acalan Chontal. Although it is also true that final *-n*'s do often elide in Modern Chontal and could have happened in this case, the vowel *-e* would still be problematic. One possible explanation for its presence in multiple occurrences of this spelling in the text, is that an *-e* was used to write what was actually an *ä* or schwa because the Spanish alphabet provided no alternative way to write it. Another possibility, one which explains both the presence of the *-e* and the lack of an *-n*, is that the author viewed this verb as a root transitive.

Nevertheless, the context of the passage in Figure 247 does not seem to allow for an incomplete. The proclitic *a-* when used with incompletives, changes the time reference to the immediate future. But the towns are not mentioned later in the dialogue but rather right before this occurrence, two lines above in the facsimile. Smailus interprets the final *-e* as probably an error and therefore analyzes it tentatively as a completive form by adding an *i* in parentheses: “(*i*?).” Smailus’s suggestion is most likely correct. If the mention of the towns’ names followed in a later sentence, the incomplete could work here in the sense of “I am about to mention them.” However, in context, the *acathane/acathani* statement refers back to the earlier mention of the towns or barrios and so would seem to demand the completive aspect here.

If this analysis is correct, this occurrence could be added to the three examples of *acathani* in Figure 246. As argued above, it would then be interpreted as encompassing the completive aspect without the enclitic. It is not necessary to suppose an error by the original author in doing so since the facsimile text is “not an original document, but a copy made by a Spanish scribe in 1614 from the version written by the native clerk of Tixchel in 1612” and “most of that latter version was also a copy made . . . from the originals . . .” (Scholes and Roys 1968:360). With that genealogy in mind, it would not be unusual for one *-i* to have been misread as an *-e* especially in the last copy made by a native Spanish speaker.

6.4.4 Evidence for Long Form *-ihi*

As already noted, demonstrating definitively the presence of the long form of the *-ihi* ∞ *-i* enclitic on verbs in the *Paxbolon-Maldonado Papers* is difficult because the completive inflection for most verb classes is *-i*. Because the temporal deictic enclitic begins with *-i* and the tendency in the *Paxbolon-Maldonado Papers* is to merge two identical vowels, especially two *-i*'s and especially in a long compound, there are no expressly unequivocal examples of the full form attached directly to verbs. To reconstruct the full form in these contexts, one must hypothesize a phonetic or graphemic merger of the *-i* inflection with the first *i* of the past temporal deictic enclitic. Although I believe that is the correct approach, there is little to rely on for evidence beyond comparison with other similar words and compound forms that display similar characteristics. Turning to compounds with numbers is also of little value because of the dearth of such examples in the text. However, there is one compound that does provide precisely the information needed for verification. In an early section of the *Paxbolon-Maldonado Papers*, the translator mentions the person who originally wrote the first part of the text in Nahuatl. He stated about that original author: *chami onihi* "he died a long time ago" (Paxbolon et al. 1614:155.7-8). The various forms of compounds with *on* have already been discussed earlier. Here it is ostensibly appended to the verbal lexeme *chami* which already includes completive inflection.²⁶¹ So the full form of the *-ihi* enclitic is attached to the adjective/adverb *on* meaning "much" or "many" to produce the meaning

²⁶¹ Although Smailus considers *chamionihi* to have been written as one word, there is strong textual evidence that it was actually written as two. Most important, the space between the *-i* of *chami* and the *o-* of *onihi* is as wide as that between most words. What is more, in the line on which *chami* begins, there is the string *dzibiltamexico*. It is written without any "word-sized" separation at all between letters, yet Smailus breaks it into three words "*dzibil ta mexico*." Perhaps one reason for thinking *chami* and *onihi* should be joined is because of its hyphenation as *cha-mi* which might be more likely for a longer word. However, on the very preceding line, an only slightly longer word, *aca-hoche* was hyphenated although sufficient space seemingly remained on the same line. In both cases, the right margin would have been slightly extended by not hyphenating the word. Considering the evidence from the facsimile, it seems unjustified to join these two words unless some independent linguistic evidence argues strongly for doing so.

“a long time ago.”²⁶² This is then positive evidence for the existence of the long form of the enclitic in Acalan Chontal although not undeniable proof of its presence on verbs.

6.4.5 Sources of *h* in Verbal Compounds with Attached Enclitic

6.4.5.1 Textual Arguments for Identifying *-ihi* as Long Form of Past Temporal Enclitic

Some of the disagreement concerning the source of the *h* in verbal compounds in the Acalan Chontal document stems from a time when the enclitic itself was not recognized as such. The problem then was to justify the presence of the *h* at all without even considering the following *i*. Accounting for an *h* other than the enclitic is straightforward in some cases. One of these is in the final word of this sentence:

hainix ukal atalon caçacanelahi (Paxbolon et al. 1614:164.8-9)

this [was] the reason I came [and] I looked for you.

While the plural form of the second person absolutive pronoun is *-etla*, Kaufman and Norman (1984:91) have noted that it is derived from *la(j)*, *la(h)* in the orthography of the *Paxbolon-Maldonado Papers*. So the *h* in the compound could come from that dependent pronoun form. Otherwise, one would be left with the *i* of the enclitic following immediately upon the *a* of the pronoun. It is also possible to argue for a process whereby the first /i/ of the enclitic elides or merges with the /a/ of the pronoun leaving *(i)hi* to write the enclitic. However, just as is the case with similar compounds in the Classic Period, I choose again to let Ockham’s razor rule and consider it instead as part of the suffix followed by the short *-i* form of the enclitic.

In the *Paxbolon-Maldonado Papers*, most instances of the temporal deictic enclitic are attached to verbs inflected for completive aspect. This has led in the past to

²⁶²To argue that the word or lexeme is really *oni* and that the first *-i* of *-ihi* is elided through a merger is not valid. As is the case with most roots in the Ch’olan and other Mayan languages, *on* is monosyllabic. The word *oni* is the same word with the short form of the anterior deictic enclitic attached.

speculation concerning the source of the *h* that appears so often near but not at the end of such verbs. One such possibility suggested by Fox and Justeson (1984:60) was that the completive status marker in Acalan Chontal is itself actually *-ih*. They gave two reasons for this view. First, citing Bricker (1981), they note that there is evidence of *-ih* being “the third person completive marker on passives and antipassives in Yucatec.” However, that is probably not directly relevant since it only verifies that such a suffix exists in a different verbal context in a Mayan language whose verbal morphology is quite different from that of Acalan Chontal. Second, they state that it shows up as *-ih* in Colonial Chontal on completive verbs “when followed by a VC postclitic” giving as an example *chumvanihix*.

There are a number of arguments that can be made against this interpretation of the *h*’s presence. Many examples have already been cited in which *-ihi* occurs even when not “followed by a VC postclitic,” in other words, not by *-ix*. The presence of the final *-i* in these examples would require an explanation if indeed the completive inflection were *-ih* unless one recognized the final *-i* as the short form of the *-ihi* ∞ *-i* enclitic. But then, would one not also have to conclude that *-ihi* ∞ *-i* is not present at all on *chumvanihix*? However, there are other examples, such as *bixihiix* (Paxbolon et al. 1614:160.20), in which the two *i*’s following the *h* make sense only if both enclitics are present. Following Fox and Justeson’s lead here would still leave one of the *i*’s unexplained. Also, although double vowels are often elided, I know of no example in which an extra *i* is added in the *Paxbolon-Maldonado Papers*.

Finally, it has also been argued earlier that particular contexts, usages, and meanings are present when *-(i)hi* or *-y*, *-(i)x* alone, or *-(i)hi* followed by *-(i)x* is attached to various verbs inflected with the *-i* of the completive aspect. What is more, these contexts, usages, and meanings are evident only when one or both those two enclitics, but not just the *-i* of the completive, is present on these and similar verbs.

The shape the morpheme would have to take in particular situations also provides evidence against a proposed *-ih* completive aspect marker. If the *-h-* were an integral part

of completive inflection, would it not also be present, at least sometimes, when the presumed aspect marker is the final syllable in the verbal compound? It never is, despite over 200 opportunities for the scribe to write it in this document. But perhaps an argument could be made that this *-h-*, supposedly an integral part of the completive aspect marker, would only become noticeable when the *-i* aspect marker is followed in the same word by another morpheme or syllable beginning with a vowel. This is attested in a different context, for example, by Ch’olti’ where the final /j/ of the reconstructed Proto-Ch’olan thematic suffix **-aj* from passive **-naj* appears sporadically only when followed by an *-el* suffix. In the same passage, one finds both *c’hohbenaël* and *c’hobenahel* with the same meaning.”be loved” (Morán 1935a:16).

82 occurrences: <i>i</i> aspect marker + V(C(V)) +/- (V)C(V)
32 occurrences: <i>i</i> aspect marker + misc. other suffixes or enclitics
50 occurrences: <i>i</i> aspect marker + <i>i</i> +/- C(<i>i</i>) +/- (<i>i</i>)C+ (past deictic enclitics)
29 occurrences: <i>i</i> aspect marker + (<i>i</i>)x (past deictic enclitic)
3 occurrences: <i>i</i> aspect marker + y (past deictic enclitic)
18 occurrences: <i>i</i> aspect marker + (<i>i</i>)hi +/- (<i>i</i>)x (past deictic enclitics)
11 occurrences: <i>i</i> aspect marker + (<i>i</i>)hi (past deictic enclitic)
6 occurrences: <i>i</i> aspect marker + (<i>i</i>)hi-(<i>i</i>)x (past deictic enclitics)
1 occurrence: <i>i</i> aspect marker + (<i>i</i>)hi-ix (past deictic enclitics)
(Indented rows itemize occurrences within preceding higher-level set.)

Figure 248. Verb compounds involving completive aspect marker *-i* in *Paxbolon-Maldonado Papers*

As summarized schematically in Figure 248, there are over eighty-two opportunities for this *h*, Proto-Ch’olan *j*, to occur preceding a vowel, many of which are the vowel *i*.²⁶³ Even when the aspect marker *-i* precedes what would be another *i* (fifty times not including three disputable *acathani* examples), it merges with that *i* instead of inserting an *h* twenty-nine times. These are all compounds with the enclitic *-ix* and all involve the reporting of historical events or distant-past contexts. Another three are the

²⁶³ A version of this figure was included in Wald (2004b). However, an error crept into the first number in the table. It appears here in its original correct version.

result of a compound with *-ihi* ∞ *-i* and are back-references. That leaves eighteen of the fifty that do include an *h* between the *i*-vowels, and all of them are also in back-reference or distant-past contexts.

So what conclusions should be drawn from this statistical data? Rather than evidence for a completive aspect marker in *-ih*, all indicators point squarely in the opposite direction. The ***h* is never present in nonreferential or nondistant-past contexts** following the *-i* aspect marker. That alone makes a strong prima-facie case for *h* having something to do with referential and distant-past contexts. In three cases where the temporal deictic enclitic *-i* (written *y*) is explicitly present there is no *h*, possibly due to syncope or elision, but probably due to employing the short form of the enclitic instead. This means that although the *h* is a sufficient reason for the enclitic's presence in these circumstances, it is not a necessary one, because the referential context (three examples of only the completive: *-i*) and even a form of the enclitic (three cases of completive plus short enclitic: *-iy*) can exist without it. Finally, of the eighteen cases in which there is an *h* after the *-i* aspect marker, all of which are in referential and distant past contexts, seven also include the enclitic *-ix*. However, in most of its occurrences (twenty-nine of thirty-six), the *-ix* enclitic is not preceded by an *h* despite the historical or distant-past context. That and the occurrence of *bixihiix*, with two *i*'s preceding the final *x*, provide good evidence that both the enclitics *-ihi* ∞ *-i* and *-ix* are present in cases when *-ihix* is written. In the case of *bixihiix*, the third *i* would otherwise be unmotivated. Finally, the remaining eleven examples with an intervening *-h-* are in referential or distant-past contexts and they do include the enclitic *-ihi*. I conclude from this that the two *i*'s, that of the aspect marker and the first *i* of the enclitic, merge in all of these cases just as the aspect marker and the *i* of the enclitic *-ix* merge in all but one of the examples.²⁶⁴ Because there is no evidence for the presence of this supposed *-ih* aspect marker except where the past temporal deictic enclitic is expected, I conclude there is no convincing reason for positing it for Acalan Chontal. Instead, the more simple,

²⁶⁴ *Cahiix* in Paxbolon et al. (1614:169.12).

straightforward, and defensible conclusion is that the source of the *h* is the past temporal deictic enclitic *-ihi*. The *h* is present in these circumstances only when the context indicates back reference or distant past.²⁶⁵

6.4.5.2 Reasons for Ruling Out *-h-* in *-ihi* as Epenthetic

Precisely the same arguments just made in the previous section identifying *-ihi* as the long form of the past temporal enclitic can be used to rule out the *h* in these contexts as epenthetic. That view asserts that the *-h-* is inserted between the two vowels to either separate two vowels or to bridge the gap between them. If it were simply epenthetic, it should also be present following the completive aspect marker in contexts other than back references or distant past. Also, it cannot serve simply as a bridge between the *-i* completive status marker and the enclitic *-ix* because the *h* is also present when the *-ix* enclitic is not, contrary to a statement by Fox and Justeson (1984:60). Most of the time, twenty-nine times, it is not present between completive inflection and the enclitic *-ix*. It is present with *-ix* seven times. To argue that this *h* is present when completive inflection is followed by the enclitic *-ix* when it occurs less than 20% of the time in that context weakens the pro-epenthetic argument considerably. But more critical, this *h* is also present eleven times when the enclitic *-ix* is absent – more times than when *-ix* is present. In sum, all this evidence points toward a cause other than the presence of the enclitic *-ix* for the presence of the *-h-*.

Because the *-h-* is present even when *-ix* is not, and because two reconstructible adjacent vowels, namely *i*'s, do not normally motivate its presence without the back-referential and distant-past contexts, the most straightforward analysis is its being part of the past deictic enclitic *-ihi*. Comparatively speaking, the argument for epenthetic motivation of the *-h-* is quite weak once one actually examines the text in detail. That *-ihi* is a well-documented form of the past temporal enclitic elsewhere in Acalan Chontal adds

²⁶⁵This factor also lessens the possibility that *-ih* is a resultative (“perfect”) suffix in these contexts; a possibility raised but not justified in detail by MacLeod (2004:307-308). This issue has already been broached and answered in the negative for the reasons given in Section 6.4.3. However, more detailed arguments against this possibility are provided below beginning in Section 6.4.5.3.

to the likelihood that it is the most likely candidate for its source. That an epenthetic *-h-* would occur only in back-reference and distant-past contexts in which another perfectly reasonable explanation for its presence exists, that it is the enclitic *-ihi*, is by itself solid evidence for calling the epenthetic theory into question. That the proposed epenthetic *-h-* would be absent more times than not in otherwise supposedly equally motivated circumstances is enough reason to reject epenthesis as the motivation for its presence.

6.4.5.3 Reasons for Ruling Out *-ih-* in Acalan Chontal as Resultative Aspect

Recently, a new proposal was made by Barbara MacLeod (2004) concerning the identity and function of the morpheme *-ih* and, by extension, the compound *-ihi* in the Paxbolon-Maldonado Papers. Since it calls into question my earlier interpretation offered in 1997 (cf. Wald 1998a, 1998b, 2000a, 2004b) of that morpheme compound as the longer form of the temporal enclitic for “ago, earlier,” it is important to evaluate the evidence for it and to provide specific arguments relevant to this counter-proposal.

Although accepting *onih* as an example of what I have identified as the long form of the enclitic *-ihi* ∞ *-i*, MacLeod (2004:308) both calls it an “anomaly” and also follows Robertson et al. (2004:264, 288) in interpreting the first part of it, *-ij*, as a noun meaning “day” or “time period.” She states “I would agree that the *-ihi* of *onih* (with a Ch’ol variant *oniyi*) is likely to be the full form of the temporal deictic clitic (from **-eej-eej*) in a morpheme sequence meaning ‘many (time periods) ago’.”

Although she agrees with my analysis of *-ihi* as past temporal enclitic in this case, she also calls it an “anomaly.” As attested in several examples from Colonial, Modern, and Classic Ch’olan languages shown in Figure 195, Figure 211, and as reconstructed in Figure 194 (all above), long forms of the enclitic such as *-ijiiy* (Classic Ch’olan) and *-ihi* (*-iji*) (Chontal, Ch’olti, Ch’ol) are instead quite common and can be attached to various nouns and adverbs in these languages. While it is true that such examples on adverbs, adjectives, and nouns are rare in the Acalan Chontal document, examples of the short form *-i* on numbers, time-periods, and adverbs are non-existent in the same document.

Yet the occurrence of the short form on nouns or adverbs in Colonial Chontal still could not be considered anomalies simply because this twenty-seven page document does not contain them. For all these reasons, I argue that there is no evident cause to call *onihi* an anomaly especially when a colonial sister language Ch'olti' contains examples of noun-enclitic compounds such as *acbihi* (*ak'b'iji*) and *chacbihi* (*chak'b'iji*) and the modern version of another sister language, Ch'ol, contains examples such as *oniyi* and *chubih* (*chäb'iji*) (cf. Sapper's 1907 word list in Hopkins and Josserand 1988d).

An indication as to why MacLeod might also argue that the long form of the enclitic *-ihi* does not occur on verbs in Acalan Chontal is apparent in her acceptance of Robertson et al.'s interpretation of *-ij* as a noun meaning "day" or "time-unit." A number of arguments against this interpretation have already been provided in detail above (see Section 5.2.3.4). Here it will only be reiterated that neither *-ij* (*-ij*) in Ch'olan nor *-ej* (*-eej*) in other Mayan languages is a noun in any of the attested contexts in which it occurs. Instead, it is always an adverb, most often with a meaning similar to English "hence, later, from now, at a future time." It can also have the connotation of a neutral temporal indicator, and so also adverbial, which allows it to combine with *-iij* to indicate "ago, earlier," or "time in the past." The enclitic *-ij* can combine with nouns such as numbers or time-periods, in which case it can point to a future time.

However, there is really no demonstrable evidence of the need to add a noun meaning "time-period" to a time-period noun such as *haab'* for "year." Conversely, if *haab'* instead substitutes for *-ij* meaning "day" or "time period," then why would *-ij* also be suffixed to *haab'* in other cases. It seems then that such an argument tries to have it both ways, that is, that *haab'* can both substitute for *-ij* and also take it as a suffix or attached enclitic.²⁶⁶ What is more, as argued earlier, there is also no independent evidence for its meaning "day" or "time period." Instead, the presence of the adverbial *-ij*

²⁶⁶Calling this morpheme "irregular" or "suppletive" for that reason, as do Robertson et al. (2004:264) does not explain its function but simply admits that the explanation given does not match the enclitic's behavior. It points to the inadequacy of the theory rather than justifying it. Also, as noted earlier, *haab'* is by no means the only word with which its analysis as "day" or even "time-period" does not correspond.

enclitic simply gives a clear indication of non-past time or of time in-the-future such as “hence, later” when it is attached to a word indicating a specific time period.

MacLeod also interprets all of the examples of *acathanihi* in the Acalan Chontal document as “transitive perfects.” Although the suffix *-ih* does not correspond to the resultative (her “perfect”) in Tzeltalan, MacLeod (2004:307) posits a change in the vowel in this way:

“Alternatively, I find it reasonable that this suffix represents a fossilization of the perfect *-ej* plus the anterior deictic clitic *-iiy* (shortened to *-iy* by Colonial times) with regressive vowel assimilation – not uncommon in relevant languages – yielding *-ij-iy*. As such, this suffix sequence would be an exact reflex of that seen on the derived transitive stems in the script.”

I would argue, however, that it is clearly **not** an exact reflex of the resultative in the Classic-Period script. First of all, the enclitic, even if it were the short form *-iy*, would not be a necessary or integral part of the purported resultative construction. As pointed out earlier in Section 6.4.5.1, a merger of the /i/ of the completive and the /i/ of the enclitic is attested and is clearly a common occurrence even though the enclitic does not represent a morphological suffix. We have also seen that the addition of an enclitic would regularly shorten the previous syllable if long or even cause it to elide, given that the stress moves to the final syllable of the enclitic. But these types of changes are understandable and attested despite the looseness of the connection between the verb stem plus inflectional suffix and an adverbial enclitic. The kind of change that MacLeod suggests here, “regressive vowel assimilation,” would probably require the interaction of at least inflectional and, even more likely, derivational suffixes. Those types of suffixes form a tighter bond with the stem, making it more likely to lend itself over time to such changes. Enclitics do not form that tight a bond unless they cease being enclitics and become grammaticalized as suffixes. But there is no evidence that this has happened

since there has been no change in form, meaning, or function of the original *-ihi* ∞ *-i* enclitic in these cases.²⁶⁷

It is critical to note that MacLeod is arguing for “regressive vowel assimilation,” that is, for the /i/ of the enclitic having an effect on the postulated previous /e/ of the supposed *-ej* resultative suffix. There is **no mention at all of the *-i* completive suffix** which is present on almost all verbs in the completive aspect except for intransitives in the 1st and 2nd person. In fact, her proposal completely rules out the presence of completive aspect in these cases – a situation quite contrary to what the Acalan and Modern Chontal verb systems seem to require. I instead have specifically noted the presence of the completive *-i* suffix on all the verbs that she refers to as examples of the “perfect.” She may take this view because part of her argument concerning resultatives, with which I otherwise agree completely, is that they are not inflected for completive or incomplete in the Tzeltalan or Classic Ch’olan languages. However, I find the implication of the absence of completive inflection here extremely problematic considering the practically universal presence of that suffix on verbs with 3rd person subjects (intransitive) or objects (transitive) in completive contexts throughout Chontal. It seems that MacLeod requires preserving in theory the absence of any other aspectual inflection in order to admit the presence of the resultative (her “perfect”) in Acalan Chontal.

The *-i* suffix on both the *acathaniy* and *acathani* examples in Figure 245 and Figure 246 provides very strong evidence against the presence of the resultative aspect at all in Acalan Chontal. That view does not require anything approaching the assumption that an *-i* enclitic would change an /e/ that precedes it in a previous syllable to /i/. In the case of *acathanihi*, MacLeod argues that the *-ej* suffix would change to *-ij* under the influence of the enclitic *-i*. But enclitics such as these most often have a very weak connection to the word to which they attach because only the discourse context motivates

²⁶⁷The possible development of this enclitic into a completive aspect suffix is a different matter altogether and that progression has already been discussed in detail. Here we are concerned with the enclitic that has not undergone that change and still functions as an enclitic.

their presence. For example, the adverbial enclitics do not modify the time-period nouns to which they are attached in Classic Ch'olan. Instead, the enclitics can operate on the level of the whole phrase, clause, or sentence. Instances of attachment to words such as *ak'ab'* to mean “yesterday” or *cha'* to mean “day before yesterday” are exceptions since they become commonly used compound words in their own right and thereby provide a stable occasion for diachronic modification. That is not likely in the case of fleeting inflectional attachments to verbs. Therefore a “fossilization” of a postulated “perfect” suffix with a temporal enclitic, as MacLeod proposes, is difficult if not impossible to accept, among other reasons, because the connection between the two is too tenuous. The kind of ellipsis that occurs in Classic Ch'olan when an enclitic is attached to, for example, a resultative, thereby changing *ukab'ij* to *ukab'jiy*, is a different phenomenon altogether and has to do with phonetic shortening caused by the movement of stress further away to the final syllable of the lexeme word.

There is another troubling issue concerning MacLeod's proposal. Why is it that there would be no examples at all of her “perfect” inflection without her **-iy* enclitic present. She does not point out any examples of the supposed original *-eh* (*-ej*) performing as a “perfect.” She also never addresses the question of a possible *-oh* (*-oj*) resultative for root transitives and whether an /o/ vowel would also change to /i/ under influence from a proposed final **-iy* enclitic. One is left without any textual evidence at all of a proposed perfect inflectional suffix unaffected by the presence of the enclitic. What is more, such examples of resultatives (“perfects”) without the enclitic are not at all uncommon in the Classic Period inscriptions. MacLeod herself mentions several examples which hardly ever occur with the *-iy* enclitic and, even those that often do, also occur without it. Their complete absence in Acalan Chontal would, it seems, deserve at least a cautionary note if not a satisfactory explanation. This absence of any possible resultatives without the supposed **-iy* enclitic attached is at least *prima facie* evidence of their non-existence.

It is my contention that such examples without the enclitic *-ihi* ∞ *-i* attached are not there at all because the resultative (“perfect”) similar to that found in the Tzeltalan and Classic Ch’olan languages no longer exists in Acalan Chontal. Instead, the *-ihi* suffix that MacLeod interprets as a “perfect” is a combination of the *-i* completive inflection and the long *-ihi* form of the temporal enclitic. What is more, my original argument for the presence of both an *-ihi* and an *-i* form of the enclitic is backed not only by documented ancestral and descendant attestations but also by concrete examples of both forms of the enclitic in the Acalan Chontal text itself.

Another problematic reference by MacLeod is to an enclitic in **-iy* in the *Paxbolon-Maldonado Papers*. There are no attestations of an **-iy* temporal enclitic in the text unless one argues that the completive suffix is not present on examples such as *acathaniy* or that the *i* of the enclitic has merged with the completive suffix. There are three occurrences of the compound *acathaniy* in the Acalan Chontal document. The context calls for the completive aspect marking in Chontal because it refers to a completed action and the object is in the third person, represented by the null absolutive suffix. I have analyzed this *-iy* combination as the *-i* completive suffix along with the *-i* enclitic. The enclitic may be written here as *-y* because of its position after an *i* at the end of a word. But there is also ample evidence of unrelated examples throughout the text in which the author or copyist writes *y* instead of *i* interchangeably with no difference in meaning especially directly after another vowel, as in *cayx* as mentioned above. I submit then, that an *-iy* enclitic does not exist at all in the text of the document. One might legitimately reconstruct an **-iy* based upon the *-iiy* of the Classic Ch’olan texts, but it is not clear to me how one would distinguish the pronunciation of *-iy* from *-i* or *-y* in final position. At any rate, it never occurs as such in the colonial text. What may be mistaken for it, is simply the combination of the completive suffix *-i* and the enclitic *-i* written as *-y*.

Even if one were to reconstruct the enclitic as **-iy* in Acalan Chontal, I would caution that, having reconstructed it as such, it seems incongruous to argue that *-iy*

represents both the enclitic alone and the “perfect” form plus the enclitic. It seems that MacLeod (2004:316) may be arguing just that. She first “speculate[s] that the disappearance of the productive active perfect from Ch’olan might be explained as a loss of distinction from the plain status *CVC(C)-V* without reinvention of a new perfect. . . .” She then attributes this to a loss of vowel length and “the eventual loss of contrast in final *-j* and *-h* and the reduction of *-h* to zero.” She seems to find this process taking place for the “perfect” in both the Classic Period and in the later colonial and modern Ch’olan languages.

The late spelling **’u-CHAB’-ya** at Piedras Negras (Wald, 2000c) perhaps also reflects a loss of *-j* in the following manner: *u-chab’-i(i)j-Ø-iiy* > *u-chab’-ih-Ø-iiy* > *u-chab’-i-Ø-iiy* > *u-chab’-Ø-iiy*. Forms like *oniyi* in modern Ch’ol and *acathanii* in Acalan Chontal are testimony to this process (MacLeod 2004:317).

While not disagreeing that /h/ and /j/ can and do elide in certain instances, I do not agree that *ukab’iiy* in the Classic texts in any way reflects or incorporates the resultative aspect (MacLeod’s “perfect”). If the resultative aspect marker is not present, neither is the resultative aspect, as I have already argued earlier. If the presence of the resultative depends upon and is defined by the presence of at least the *-j*, and that suffix is written using the **ji** glyphic sign, how can one then legitimately argue that the same suffix is still there in cases where there is no *-j* suffix and no glyphic **ji** sign? Following this line of reasoning, the “perfect,” having been based upon the presence of a *-j* consonant, would still have to be present with the *-j* consonant absent. This could only be maintained if the resultative were some sort of unmarked inflection. But that is undoubtedly not the case. This state of affairs is one of the major differences between arguing for the presence of the enclitic *-ijiiy* ∞ *-iiy* in these cases rather than the presence of the resultative. This enclitic and its reflexes in other Mayan languages demonstrate a long and broad history of

both long and short forms. The Tzeltalan and Classic Ch'olan resultative is not attested anywhere else without the *-j*.

I would argue precisely the same way in the case of Acalan Chontal and its *h*, except that I also disagree with identification of the form *-ih* as representing the “perfect” or resultative at all. I will assume that MacLeod is referring to *acathaniy* instead of *acathanii* here since the latter never occurs in the Acalan Chontal document.²⁶⁸ But it should be noted that in both the Ch'ol *oniyi* and the Acalan Chontal *acathaniy* examples, the change of the /h/ to /y/ or the lack of an /h/ between /i/ and /y/ simply illustrate alternate forms of the past temporal enclitic. Even if one views the *acathaniy* examples as exemplifying changes caused by /h/-elision or reduction of /h/ to /y/, neither one has anything to do with demonstrating the loss of resultative inflection.

Returning to Classic Ch'olan, there are other reasons why I have argued that the difference between *ukab'jiy* and *ukab'iiy* is simply that the resultative inflection is present in the former and absent in the latter. Such passages with or without the resultative are grammatical and make good sense, although the connotations of the statements in each case would be somewhat different. The same can be said, for example, of the contrast between *ukab'ij* and *ukab'jiy*. They are both grammatically and semantically possible but in the former, the past deictic enclitic is not present and in the latter, it is. The choice of one form over the other for either pair is not dependent upon different pronunciations or spellings but rather upon different choices of expression. Perhaps MacLeod only wished to indicate that an /h/ or /j/ can sometimes elide and **not** that *acathaniy* in Chontal and *ukab'iiy* in Classic Ch'olan somehow incorporate the resultative. If so, I do not disagree. But if the message is that the resultative later disappeared from Chontal simply because /h/ and /j/ sometimes elided, I would have to disagree for the reasons already stated. This would constitute a claim much different from that reached concerning what has happened to the /h/ of the enclitic in modern Ch'ol. Although the /h/ of the enclitic is indeed absent in *chab'i* < *chab'ih*, that elision

²⁶⁸Note that in Wald (2004b), I also erroneously wrote *acathanii* once instead of *acathaniy*

did not do away with the use of the enclitic and the ability to distinguish between “day before yesterday” and “the day after tomorrow.” Instead, the compound for the latter became *chäb’i* < *chab’ij*. Neither the enclitic nor the two words disappeared from the language. Etymologically, the different result can be traced to the loss of the /h/, the number of syllables in the original enclitic, and the usual stress upon the last syllable of a word in most Mayan languages.

In fact, I cannot find the resultative at all in Acalan Chontal nor in any of the Colonial or Modern Ch’olan languages although it is present in the Post-Classic Dresden Codex. Finally, I also disagree that the form *-ihi* in Acalan Chontal and *-ohel* in Ch’ol represent “perfect forms which survived into Colonial or modern Ch’olan” (MacLeod 2004:317). Reasons for disagreeing that *-ohel* incorporates a resultative form have been given earlier in Section 4.5.2.5. While each occurrence of this compound suffix has to be analyzed individually, all the evidence points in directions other than the resultative. The resultative is an inflectional and not a derivational suffix and so cannot and does not serve as part of a stem that can be nominalized by suffixes. There are other look-alike suffixes in the Tzeltalan and Ch’olan languages that serve to form the stems to which an *-el* can be suffixed and they have been reviewed in Section 4.5.1. As for the disputed long enclitic form, many of the reasons for disagreeing that *-ihi* in Acalan Chontal incorporates a resultative (“perfect”) form have just been presented. A few more reasons follow.

Perhaps even more troubling in view of the history of the resultative in the Greater Tzeltalan languages is MacLeod’s contention that the transitive resultative form could occur on intransitives. I agree in principle that “In Acalan Chontal, both transitives and intransitives employ this *-ihi* suffix” (MacLeod 2004:3007) although I would classify it instead as a combination of a completive suffix and an enclitic. But that provides for me an additional argument for why this combination **cannot** include a resultative aspect suffix. None of the other languages that employ similar resultative suffixes give any evidence of either the transitive or the intransitive suffixes crossing that boundary between those two basic verb types. While there is evidence that the Proto-Mayan **-o’m*

transitive resultative suffix did become an intransitive resultative in Greater Tzeltalan (see Section 4.2), this required deploying a new one in *-oj* ∞ *-ej* for transitives rather than sharing one between both verb classes.

It appears that one is left here with two choices. The first is accepting an analysis that includes the otherwise unattested anomaly of a transitive suffix being used on intransitive verbs. The other is acknowledging the alternation of a longer and shorter form of the of same enclitic, an alternation that occurs in all of the Ch'olan languages, and thereby interpreting the *-ihi* form as a temporal deictic enclitic in Acalan Chontal. The latter seems to be the most likely alternative.

As is the case with most of the traditional morphological and inflectional suffixes in the Mayan languages, there is a clear distinction in the Tzeltalan languages between the suffixes used on transitive and intransitive verbs for the resultative aspect. It has been argued in this study that this distinction was preserved throughout the Classic Ch'olan period. Michael Carrasco and I have offered *-o'm* as the intransitive completive inflectional suffix in Classic Ch'olan. Extensive and detailed linguistic and contextual arguments for it have already been presented above in Section 5.2. Evidence has also been presented that the resultative aspect has not survived in any of the Colonial or Modern Ch'olan languages. In her article, MacLeod has not suggested any form at all specific to the intransitive resultative in Classic Ch'olan nor has she even suggested that a separate one exists. That may be part of the reason she has turned to the transitive resultative suffix to fill this gap. She states in regard to the Acalan Chontal *-ihi* form:

Furthermore, its assimilation to *-ij-iy* and its extension to intransitives might not be an Acalan innovation, but rather a Classic Ch'olan one, given one telling script example wherein a perfect interpretation works extremely well, plus others that are certainly food for thought (MacLeod 2004:308).

The example “wherein a perfect interpretation works extremely well,” according to MacLeod, is one from the Tortuguero Box that will be shown below in Figure 278 and will be discussed in great detail later in Section 6.5.9.2.1. Macleod (2004:309) translates the relevant text as “two 20-day months prior . . . he had died (road-entered), Balam Ajaw.” MacLeod’s approach to this passage and the emphasis on the verb’s translation as a past perfect helps to zero in on two critical areas in which I disagree with her despite general agreement on the existence of the resultative in Classic Ch’olan. First, I disagree that **intransitive** verbs in either Acalan Chontal or Classic Ch’olan take a **transitive** resultative suffix. Second, I also disagree that the resultative aspect is present in any form in Acalan Chontal. Third, I disagree that there is any good evidence for interpreting the long form of the enclitic, *-ijiiy* in Classic Ch’olan or *-ihi*, in Acalan Chontal as a transitive resultative. Various combinations of *-Vjiiy* and *-Vhi* can represent instead a combination of a completely different morpheme with the temporal enclitic. Theories regarding the identity of that possible different morpheme must incorporate well established evidence from the specific language itself and its closely related languages in order for them to be credible. There must be valid reasons for ruling out the existence of the long form of the enclitic since its existence is well established as *-ijiiy* in Classic Ch’olan and *-ihi* in Acalan Chontal, as well as its reflexes in the other Ch’olan languages.

From my perspective, there are several problems with MacLeod’s proposed identification of the “perfect” aspect in Acalan Chontal. Most of them have already been addressed indirectly in the detailed examination of both the resultative-aspect inflection in Classic Ch’olan and the temporal deictic enclitic in both Classic Ch’olan and Acalan Chontal. Only a few of the issues will be discussed specifically here. The analysis MacLeod provides of the passage from the Classic-Period Tortuguero Box, among the other problems already just mentioned, illustrates a case in which the distinction between the “perfect” and the “past perfect” is ignored. The many examples that have been presented earlier have clearly demonstrated that the Classic-Period texts come perhaps closest to the English past perfect or pluperfect when distance numbers are combined

with verbs that have the past deictic enclitic attached. It is that combination that produces the opening for the English past-perfect translation and not the supposed presence of a resultative (“perfect”) aspect suffix. This would be true even if one did not agree with the argument upcoming in Section 6.5.9.2.1 that the resultative inflection is in no way to be found in the construction in this particular passage. As demonstrated in detail there, it represents instead a compound noun *ochb’ih*, a transitivizer in *-a* which is eventually elided in this case, an antipassivizer in *-j*, and the long form of the deictic enclitic *-ijiiy*.

It is indeed ironic that the form *ukab’jiiy*, which MacLeod uses as one of the prime examples for her argument for the “perfect” in the Classic Period texts does not correspond at all to the English present perfect, and even much less to the past perfect. The proposed present perfect translation “He has overseen it” does not fit in those contexts because the reference in them is to a single, one-time event, not to an event that could be repeated as would be implied by using the English present perfect. If the usual passages containing verbs inflected for the resultative in the Classic period are not amenable to translation as present perfects, they are even less receptive to interpretation or translation as past perfects (pluperfects). I suggest then that MacLeod has confused the effect of the past enclitics in distance number contexts with resultatives or “perfects” that do not provide pluperfect connotations at all. It is because the passage from the Tortuguero Box contains a distance number and a past temporal enclitic that the pluperfect translation seems well suited. Even if transitive perfect inflection were present, which it most emphatically is not and cannot be on an intransitive, it would not provide the relevant criterion allowing the translation of the antipassive verb in the passage as a pluperfect. Instead, the purpose served by resultative inflection is entirely different, as has already been explained in great detail in Section 4.

MacLeod makes reference to Smailus’ and my translation of certain passages using either the Spanish or English perfect. Although it is true that *acathanihi* has at times been “translated by Smailus and Wald as ‘ya he dicho’, ‘I have already said/mentioned it’” as noted by MacLeod (2004:307), it has also been translated by

Smailus (1975:203) as “como yo *ya* dije” “as I already said.” While neither is a literal translation, they are both attempts to provide a colloquial rendition of the original Chontal. In one case, Smailus used the Spanish present perfect and in the other, the preterite. I have also elsewhere used either the English past, perfect, or even the past perfect to translate passages in Acalan Chontal which included verbs suffixed by the past temporal enclitic whether as *-i* or *-ihi*. However I find no evidence at all that the Acalan Chontal document actually contains past, perfect, or past perfect verbal suffixes. Instead, it is English that requires or allows the use of all three of those tenses and aspects to colloquially match what was expressed by the completive aspect and the past temporal enclitic in various different contexts in Acalan Chontal. It appears that Smailus employed a similar approach. Since his translations represent the word *acathanihi* picked out of context, he chose to translate it into Spanish as a preterite in one instance and as a perfect in another. Both are possible colloquial Spanish translations depending upon the context. Neither exists as such in the verbal morphology of Acalan Chontal. In order to avoid possible misunderstandings in this present work, I have attempted to provide translations that are more literal and closer to the original Acalan Chontal rather than to colloquial English. I have also done so to avoid the misinterpretation being commented upon here, that is, the impression that Acalan Chontal might have actually made use of either present perfect or past perfect inflection.

Another important issue to address is MacLeod’s seeming alternation between the present perfect and past perfect as though a possible colloquial use of either in an English translation proved the presence of the perfect in Classic Ch’olan or Acalan Chontal. Above in Section 6.2.4, it was noted that the English past perfect does include tense but is also a way to represent taxis, that is, the temporal relationship that obtains between two events. That element of taxis is not really a part of the English **present** perfect. Based upon that major difference, the feasibility of a past perfect translation alone is not enough to justify the conclusion that the same morpheme would incorporate the present perfect

meaning as well. Their roles in English, and to a certain degree in Spanish, are too different to equate them.

For over a quarter century, some epigraphers have been translating Classic Ch'olan sentences containing distance numbers and verbs with attached past temporal enclitics into English and Spanish as past perfects (pluperfects). This has been true even for sentences with the past enclitic *-iiy*, and not just for those with the long form *-ijiiy*, attached to verbs and time-period nouns. But, as argued in detail in Sections 6.2.4 and 6.3, there are no morphological suffixes such as those described by MacLeod as perfect or pluperfect inflection on verbs in those passages. The sense of the English past perfect comes instead from a combination of the distance number and the *-iyiiy* ∞ *-iiy* enclitic. To attribute it instead to a grammaticalized past perfect aspect in Classic Ch'olan is anachronistic.

In effect, the presence or absence of the /j/ in those cases does not change the meaning or syntax of those passages at all. Thus MacLeod's (2004:308) proposal that the **possibility** of a translation such as “‘two 20-day months earlier’(*cha' winik-ij-iiy*) ‘he had road-entered (died)’ (*och-b'ih-i(i)j-iiy*)” is evidence for the presence of “a morpheme *-ijj* [that] is an intransitive perfect marker whose underlying form is //*-i-ej//” is simply not defensible.²⁶⁹ There are hundreds of other passages without any sign of *-VVj* but only the *-iiy* of the enclitic that are just as amenable to a past-perfect translation. But that is not sufficient evidence to demonstrate the presence of a past perfect morpheme on any of these verbs, whether they include an *-ijiiy*, *-jiiy*, or *-iiy* shaped morpheme. The same is true of verbs in Acalan Chontal that have either the *-ihi* or *-i* enclitic attached.

It is the juxtaposition of two events referentially connected by a pronoun and accompanied by the past temporal enclitic indicating temporal directionality that allows the pluperfect to be substituted in English or Spanish for what is actually expressed by different morphemes and syntax in the original. To reiterate, this past enclitic has two

²⁶⁹As has already been noted in Section 2.2.10.9, the suffix that otherwise occurs on *ochb'ih-* in verbal contexts when not elided is *-aj*, not *-ij*. Section 6.5.9.2.1 expands upon this and provides an actual example. It only occurs with the syllable *ji* in those contexts in which the enclitic is present.

allomorphs, one a longer form including a /j/ (/h/ in Acalan Chontal) and the other not, either of which can be used without a change in meaning. It's two parts are related etymologically to Proto-Mayan *-eej and *-eer, which in combination form *-ejeer, reflexes of which exist in virtually all Mayan languages. This /j/ or /h/ of the long past temporal enclitic form is not the same /j/ or /h/ that occurs in the transitive resultative suffix. This is true for passages in the Acalan Chontal document for which MacLeod (2004:307) "would alter these translations in favor of a past perfect 'after that had come about' and 'he is the one who had fled'." It is also true of those from the Classic Ch'olan texts of which MacLeod (2004:308) states "may justify a perfect interpretation of *uht-ij-iiy* as 'it had happened' and *johy-(a)j-ij-iiy* as 'it had been paraded around'." Since *uhtiyy* which appears hundreds of times in similar contexts provides just as much justification for translation as a past perfect, the presence of the -j- is irrelevant to the argument.

In both cases, MacLeod seems to assume that the possibility of translating a verb in context as a past perfect is a sufficient argument for the presence of a present perfect morpheme. It must also be kept in mind that MacLeod had originally argued for the presence of "perfect" inflection based upon a present-perfect, not a past-perfect interpretation. She does not provide any further justification for doing so other than the same presence of a *j* or an *h* that she used to argue for the present perfect along with the suggestion that one can translate these verbs as pluperfect in English. As before, no mention is made of all the other passages that use the short form of the enclitic without the *j* in Classic Ch'olan that can also be translated as pluperfects. I submit that one could translate these just as well or better colloquially in English as past tense, "after that came about," "he is the one who fled," "after it happened," and "after it was paraded around" depending upon the prepositions, adverbs, and syntax one uses. However, that does not mean that the inflection must represent the English past tense.²⁷⁰

Even more unacceptable in these quoted cases is that they are all intransitive verb stems and roots. I agree with MacLeod's (2004:307) factual statement, "In Acalan

²⁷⁰Coincidentally, the proposal that these are past tense inflectional suffixes made by Robertson et al. (2004) will be taken up later in Section 7.

Chontal, both transitives and intransitives employ this *-ihi* suffix.” However, it should be classified as the combination of a completive suffix and an enclitic. There is indeed no independent analytical evidence at all for a transitive resultative inflectional suffix appearing on an intransitive verb in any of the Tzeltalan or Ch’olan languages. Also, none of the Mayan languages provide any evidence of the same resultative suffixes operating on both transitive and intransitive verbs at the same time. Of even greater relevance is that neither of the other two languages that employ this resultative suffix, Tzeltal and Tzotzil, give any evidence of either the transitive or the intransitive suffixes crossing that boundary between those basic verb classes.

Although there is evidence that the Proto-Mayan transitive **-o’m* resultative suffix did become an intransitive resultative in Greater Tzeltalan as noted in Sections 4 and 5, this required deploying a new one in *-oj* ∞ *-ej* for transitives rather than sharing one between both verb classes. When one couples the possibility of this “anomaly” with the relatively frequent use of both the long and short forms of the enclitic in most of the Mayan languages, interpreting the *-ihi* form in Acalan Chontal and the *-ijiiy* form in Classic Ch’olan as the past temporal enclitic is clearly the most plausible alternative. The contexts in which the resultative and the past temporal enclitic occur in Classic Ch’olan intersect but are ultimately not the same. The two morphemes do not depend upon each other. There are many examples in which the resultative occurs unaccompanied by the past temporal enclitic. There are also many in which the past temporal enclitic occurs and the resultative does not. Care should be taken to distinguish the two in order to maintain a clear view of the broad spectrum of expression available in the Classic Period texts. With the introduction of the completive aspect in Acalan Chontal, there is also an overlap in the contexts in which the completive aspect and the past temporal enclitic are used. However, there are no examples of the past enclitic used on verbs except in conjunction with the completive aspect. The resultative aspect inflection has, however, disappeared altogether from Acalan Chontal. Between the time the *Paxbolon-Maldonado Papers* were written and the time Modern Chontal was recorded, the past temporal deictic

enclitic also ceased to be attached to verbs. It may be that the completive aspect suffix itself derived etymologically from the past temporal deictic enclitic, as has already been argued above. Nevertheless, even if true, its actual meaning and use was altered substantially in the process, as is always the case in grammaticalization.

6.4.6 Enclitics *-ix* and *-ihi* in Acalan Chontal and Other Ch'olan Languages

6.4.6.1 More Literal Translation of *acathanihi*

In proposing that there is indeed a counterpart to the Classic Ch'olan resultative aspect inflection in Acalan Chontal, Macleod (2004:307) provides this argument as support: “the frequent addition of the particle *-ix* ‘already’ reinforces the perfect quality of the verb.” Although *-ix* does carry the general meaning of “already” in some Ch'olan languages, as we shall soon see, demonstrating that meaning in Chontal is quite elusive. Smailus, on the other hand, found that “*ya*” (“already”) was already contained in the lexeme *acathanihi*. In other words, he found that the enclitic *-ihi* is itself translatable colloquially as “already.” That is because it is an adverb and carries the meanings of “earlier, ago, in the past” which includes the connotation of “already” since anything that happened earlier or in the past, happened already. So the connotation of “already” is present whether or not *-ix* also occurs in the sentence. If *-ix* really meant nothing other than “already” in Acalan Chontal, its presence would add nothing to the context.

However, “already” is not a good equivalent of *-ihi* ∞ *-i* and translating the past adverbial enclitic in that way can also be quite misleading. In some earlier translations of the *acathanihi* passages I attempted to use “already” in the translations but in the meantime have realized that doing so has made it next to impossible to provide a literal translation because of unwarranted connotations that word entails. A case in point is the *a-* proclitic in *acathanihi*. I noted that this proclitic “moves the sense of ‘already’ or ‘in the past’ to the more recent past” and noted that this would be best indicated by the English word “just” (Wald 2004b:219). However, this could not be done because one

cannot normally semantically or grammatically combine the English perfect with “just” and “already” in the same sentence as can be seen in this nonsensical formation *²⁷¹“I have just already said it.”

Nevertheless, the Acalan Chontal lexeme *acathanihi* includes the connotations of both enclitics. A much more accurate literal rendition is “I just said it earlier.”²⁷¹ Since “already,” “just,” and the perfect could not combine in English (nor could their equivalents in Spanish either), that should have been a clear signal that the translation was inaccurate. Instead, what constitutes *acathanihi* is *a-* meaning “just, recently,” *-(i)hi* meaning “in the past, earlier, back then” and the completive suffix *-i*. As a result, “I just said it earlier” provides one of the best, if not the best, literal translations because it includes the meanings and connotations of all the morphemes in the complete word. A morphemic equivalent of the English present perfect is not necessary or appropriate and neither is the word “already.”

6.4.6.2 Meaning and Function of *-ix* in Acalan Chontal

As already noted, one of the uses of the enclitic *-ijiiy* ∞ *-iiy* in both Acalan Chontal and Classic Ch’olan was as an adverbial version of what could otherwise be expressed through morphological taxis (“relative tense”) inflection on verbs. Some of the Ch’olan languages also employ the adverbial enclitic *-ix* in much the same way. However, the temporal enclitic *-ix* does not function that way in Acalan Chontal. Instead, it serves in the *Paxbolon-Maldonado Papers* more in the sense of English “then” or “back then.” When Smailus does translate it at all, he uses “entonces” in Spanish. It occurs over one-hundred times in the document and it is almost always used in the same way, for example: *cahix uHelel padre Juan Rodriguez in por vicarioil*” (Paxbolon et al. 1614:169.29-30). “It began **then** his substitution (“replacement”), Father Juan Rodriguez into the vicary

²⁷¹Robertson et al. have suggested that the *a-* proclitic means “already” but in Section 6.3.3, I have offered data from Chontal sources suggesting that “already” is not the best match for that proclitic either.

Very seldom if ever does the English translation “already” fit in comfortably for *-ix* in Acalan Chontal. Instead, it is best understood as “then, at that time” in the context of the retelling of history. Further evidence of that interpretation comes from the frequent co-occurrence of other adverbs and particles as *me*, *meen*, and *ab’i*.²⁷² As a result, because it does not mean “already” in Acalan Chontal, *-ix* cannot be used as an argument for the presence of a possible perfect or pluperfect in that language.

Indirect, but nevertheless supporting, evidence that *-ix* does not mean “already” or Spanish “ya” in Acalan Chontal comes from Modern Chontal. Knowles (1984:402) provides an entry for *ix* only as it is used in compounds with *ta* as *ixta* “until” and *ixti* “perhaps.” Keller and Luciano G. (1997:118,123) also include *ixta* used as either an adverb or preposition with the meaning “hasta” (“until”). They do not include *ixti* but do add *ixto* as either an adverb which is not usually translated into Spanish or as a particle with the meaning “mira” (“look”) used as an expression of surprise. There is also a listing for *-ix* or *-x* as a substitute for *chich* as an adverb with the meaning “sí” (“yes”). That *-ix/-x* morpheme may, however, not be related etymologically with the enclitic *-ix* being discussed here. Important for the present purposes is that there is no evidence at all for *-ix* being used as an adverb with the meaning “already.” In fact, in modern Chontal, even the somewhat related meaning of “then, at that time” from Acalan Chontal has been lost.

6.4.6.3 Meaning and Function of *-ix* in Other Colonial and Modern Ch’olan Languages

In other closely related languages, *-ix* does indeed play the role wrongly suggested for Chontal. In Ch’olti, Morán (1935a:18) finds it used with what he calls a passive participle. Thus *puyul ix* is translated by him as “ya esta quemado” “it is already burned.” But note that Morán does not translate this form as a past perfect. In fact, he does not

²⁷²This contextual review is backed by Kaufman and Norman’s (1984:139) reconstruction of Proto-Ch’olan **-ix* as an enclitic meaning Spanish “ya” and English “already, now” in Ch’ol and Ch’orti’ but not in Chontal. I would only add that it is also present with that meaning in Ch’olti’ as well.

even use a true Spanish passive construction which would be “**es quemado**” instead of “**esta quemado**.” What he provides is rather a type of Spanish resultative made up of the verb “**estar**” and a participle used as a predicate adjective. The enclitic *-ix* serves simply as an adverb equated in this context with the Spanish adverb “**ya**,” “already.”

For Ch’olti’s modern sister language, Ch’orti’, Pérez Martinez (1994:67) analyzes this form as an example of the completive perfect aspect (“**completivo perfecto**”): *injatz’i’x* “**ya le pegué**” “I already hit him.” However, although he calls it a perfect, the translation into Spanish reflects instead a preterite. Also, although he calls it an aspect (“**aspecto**”), that still that does not seem to mean that he judges it to be a grammaticalized form. Instead he states further “Este aspecto se indica por medio del enclítico *-i’x -ix*.” This aspect is indicated by means of the enclitic *-i’x -ix*.” But if it is an enclitic, it is not an aspectual suffix despite its ability to serve just as effectively as if it were. What might be accomplished by a verb and an enclitic in one language may require an aspectual or combination tense-and-taxis morphological inflectional suffix in another.

For Ch’ol, Hopkins and Josserand (1988b:4) list *-ix* as one of the “Other affixes and clitics which combine” with the inflectional prefixes. Elsewhere (Josserand and Hopkins (1988a:7) they include *-ix* in the second position under the column heading “Tense-Aspect.” One example they give is “*Tza’ ix k mänä*. ‘I already bought it.’” As such, it is a variation on the completive aspect which uses the particle *tza’* in its formation. They note that it is also combined with the incomplete aspect indicator *mu* forming *mux* to refer to immediate or proximate action. This latter interpretation corresponds to Aulie and Aulie’s (1998:238) analysis. Aulie and Aulie (1998:125) also list *tza’* as a particle “que indica el aspecto de tiempo pasado” (“which indicates the aspect of past time”). However, they classify *tza’ix* as an adverb meaning “**ya**” as in “*Tsa’ix ujti c päc’ c chol*.” “Ya terminé de sembrar mi milpa.” (“I already finished planting my field”).

Warkentin and Scott (1980) analyze what is the same Ch’ol language, but, in their case, the dialect spoken in Tila. Aulie and Aulie stress Tumbalá Ch’ol, but all of them,

including Josserand and Hopkins, try to point out dialectal differences where they occur. What is different about Warkentin and Scott is that they discern a much wider variety of tenses and aspects than either of the other two pairs of linguists. For example, they explain how by using forms with the suffix *-bil* (Tumbalá) or *-äl* (Tila) and independent pronouns, they form the “perfect aspect or tense” (“tiempo perfecto”). Thus *mäñal c cha’an* is “yo lo he comprado” [“I have bought it”]. The “plusquamperfecto” (“pluperfect” or “past perfect”) is formed in the same way except “se agrega el sufijo *-ix* al participio *mäñal* (Ti.) o *mänbil* (Tum.)” [“one adds the suffix *-ix* to the participle *mäñal* (Tila) or *mänbil* (Tumbalá)"] (Warkentin and Scott 1980:41). An example they provide is “*mäñalix c cha’an ti tyali Juan* (Ti.) or *mämbilix c cha’an tsa’ tili Juan* (Tum.) for “yo lo había comprado (cuando) vino Juan” [“I had bought it (when) Juan came”] (Warkentin and Scott 1980:41). Here we have not only the classification of *-ix* as a suffix rather than an enclitic, but the whole construction is explicitly classified as a pluperfect. The other two teams of linguists translate and classify it either as a completive or pasado (past) with the addition of “already” or “ya” respectively.

There are several points of interest here for the present discussion. It is noteworthy that Warkentin and Scott, who ostensibly recognize a grammaticalized pluperfect construction here, do not add the word “ya” “already” to their translation. Even though it would surely sound better with “ya” (or in my English translation with “already”), they do not include it. That is likely because they have already used *-ix* as a grammaticalized pluperfect suffix and so cannot have it also serve again at the same time an adverb meaning “ya” or “already.” The question to ask is whether in Ch’ol *-ix* is truly ensconced as a pluperfect morphological suffix and even whether the pluperfect **as such** is in common use at all.²⁷³

Perhaps these sentences are indeed better analyzed as the completive aspect or “pasado” along with the adverbial enclitic *-ix*. Aulie and Aulie (1998) make it difficult to

²⁷³ A separate but interesting issue would be to investigate whether its creation and common use came about as a result of the need to translate sacred documents into Ch’ol or simply because of the influence of Spanish and a rise in Ch’ol-Spanish bilingualism.

interpret it that way because they refer to *-ix* as a suffix. Josserand and Hopkins (1988b:1) seem to do the same since they list it under affixes instead of clitics. For them *-to* is an enclitic indicting imperfective aspect and *-ix* an affix indicating perfective aspect. However, in the translation, the only difference between the completive *tza buchleyon* “I was seated” and the perfective *buchulonix laj* “we were already seated” seems to be the addition of the word “already.” I believe it could be analyzed just as well as an adverbial enclitic rather than an aspectual suffix and the semantic results would be the same. I do think that whatever its most accurate classification is in modern Ch’ol, at least the diachronic evidence points toward its origin as an enclitic with the meaning “ago, back then, already, in the past.”

I have already presented evidence that *-ihi* ∞ *-i* in Acalan Chontal and *-ijiiy* ∞ *-iiy* in Classic Ch’olan are indeed enclitics and not morphological suffixes. Arguments based upon that evidence will be reviewed again later in another context (see Section 7.2.3). Enough has been established from the reference to Ch’ol that points toward a parallel between the use of *-ihi* ∞ *-i* in Acalan Chontal and *-ix* in Ch’ol in forming a construction in each of those two languages that in some contexts can be translated as a pluperfect. Instead of using a resultative or “perfect” form, which is quite unlike a pluperfect in meaning and usage, Acalan Chontal has used the enclitic *-ihi* ∞ *-i* which has the same general meaning of “earlier, in the past, already” as the enclitic *-ix* has in Ch’ol, Ch’olti’ and Ch’orti’. This parallel suggests that what is used in pluperfect-like expressions in Acalan Chontal is not a resultative suffix at all but rather an adverbial enclitic with the general meaning of “earlier, in the past, already” combined with completive aspect. Its etymological source is an enclitic and not the reflex of the transitive resultative suffix still present in Tzeltal and Tzotzil.

6.4.6.4 Functional Comparison of *-ix* and *-ihi* in Acalan Chontal²⁷⁴

Detailed arguments have already been made in Section 6.4.4.1 supporting the presence of both the *-ihi* ∞ *-i* and *-ix* enclitics when *-ihix* and related forms are written. What has not been explicitly addressed is the question concerning how both enclitics could appear in the same sentence and how they function when they do.

What appears to be a valid observation concerning the difference between their usage has been made independently by Josie Caruso (pers. com..1999) and Søren Wichmann (pers.com. 1999). Wichmann notes that “*-ix* operates on the sentence level” and “seems to be a second-position clitic,” while “*-ihi* operates on the predicate level.” Reference to examples from the Acalan Chontal text bears out these observations. Twenty-two sentences begin with a form of *cahix*, some of which have already been cited. This verb, meaning “it began” is in the completive with the temporal deictic enclitic *-ix* attached, as in *cahix upulcel* “it began their (the god statues’) being burned.” The enclitic *-ix* here occurs in second position, in this case, attached to a verb.

The occurrence of *-ix* on an initial verb does not in itself establish it as a second position enclitic. Evidence from examples in which the verb is not initial and the enclitic *-ix* still occurs on the initial lexeme instead of on the verb would be critical. There are indeed quite a few examples that meet precisely that criterion. As a demonstrative pronoun *hain* “this, this one” begins over fifty sentences in the *Paxbolon-Maldonado Papers*. In effect, it displaces the verb from its sentence initial position. If *-ix* is indeed a second position enclitic, it should be attached to this demonstrative pronoun instead of to the verb when it occurs in such sentences. That is precisely what happens in the twenty-two cases in which it occurs in sentences beginning with *hain*. The enclitic *-ix* behaves in the same way with a counterpart of *hain*, *ya*. *Ya* also serves as a demonstrative pronoun with the meaning “that, that one.” The enclitic *-ix* attaches to it instead of to the verb nine times when *ya* begins the sentence.

²⁷⁴It should be noted that these observations are meant to be valid only for the way these two enclitics function in the *Paxbolon-Maldonado Papers*, not in the Classic-Period inscriptions. Also, much of this short section which was originally prepared for this dissertation has already appeared in print as part of Wald (2004b). However, a few critical changes have been made to it since then.

Having seen evidence that *-ix* is a second position enclitic, is there any evidence that *-ihi* ∞ *-i* behaves differently from it? If *-ihi* ∞ *-i* is indeed a predicate-level enclitic, it would instead attach to the verb when another word begins the sentence compared to *-ix* which attaches to the first lexeme instead. That is just what happens in an example we have already seen but will repeat here, *hainix bane pudzihi* (Paxbolon et al. 1614:156.28-30), “this one, then, fled.” The enclitic *-ix* behaves differently from *-ihi* ∞ *-i* by attaching to the first word *hain*. But because *-ihi* ∞ *-i* is a predicate enclitic, it attaches to the verb *pudzi* instead.

As already noted, the meaning of these two enclitics is quite similar in some of the other Ch’olan languages, but both their behavior and their meanings differ in Acalan Chontal. Behaviorally, they operate independently and follow different syntactical rules. They occur adjacent to each other when the location specified by these syntactical rules happens to coincide. That happens, for example, in a sentence we have already examined in another context: *bixihiix abi paxbolonacha ahau* (Paxbolon et al. 1614:160.20; Smailus 1975:53.6). “He traveled (went away) then, it is said, the king *Paxbolonacha*.” Because the predicate comes first in the form of a verbal compound, *-ihi* ∞ *-i* attaches to it. But because it is first in the sentence, *-ix* attaches to it as well. What is more, their meanings also differ. Because *-ix* has the meaning “then, at that time” and not “already” it often occurs with other words such as *xach*, *b’ane*, *ab’i*, *me*, and *meen* which **complement the connotation of removal in time** as already noted above. Most of these are not directly translated by Smailus in the text, but he does suggest general meanings such as “pues” (“then, well”) for *abi* and cross-references the rest, including *-ix*, to *xach* “ahora, a saber” “now, namely, to wit.” Thus, although more study could reveal distinguishing characteristics, they all indicate to some degree removal in time and authorship but sometimes also serve as discourse markers or fillers.

6.5 Forms of Temporal Enclitic *-ijiiy* ∞ *-iiy* on Verbs in Classic Ch'olan

The forms of the enclitic *-ijiiy* ∞ *-iiy* as they occur on numbers and time-period nouns in Colonial and Modern Ch'olan languages and in Classic-Period Ch'olan have already been examined in Section 5.2. How this enclitic functions on verbs in both Acalan Chontal and Classic Ch'olan has been reviewed in Section 6.2. This Section will review the forms that result when the temporal enclitic is attached to the stems of different types of verb classes in Classic Ch'olan. Possible variations in the form of the enclitic will also be examined.

6.5.1 On Transitives

6.5.1.1 On Root Transitives

Most occurrences of the root (CVC) transitive verb *chuk* “seize, carry” attest the passive form. Examples in its active form are quite rare in the Classic Period texts. One of them, from Piedras Negras Throne 1, is shown in Figure 249a. The exact transcription and meaning of the passage is obscure, but the verb form itself seems quite clear: *uchuku'w ikitz t'ab'?* *tanlamnaah* “he seized (“carried?”) the bundle? into the half-period building.

Otherwise uninflected root (CVC) transitives with the past temporal enclitic attached are also rare and, so far, unique in the Classic Period texts. The one shown here from Yaxchilan Lintel 46 in Figure 249b has already been illustrated and discussed in context in Section 6.3.4.1. It was transcribed *uchukiiy etz'nab' suutz* “He (the one just

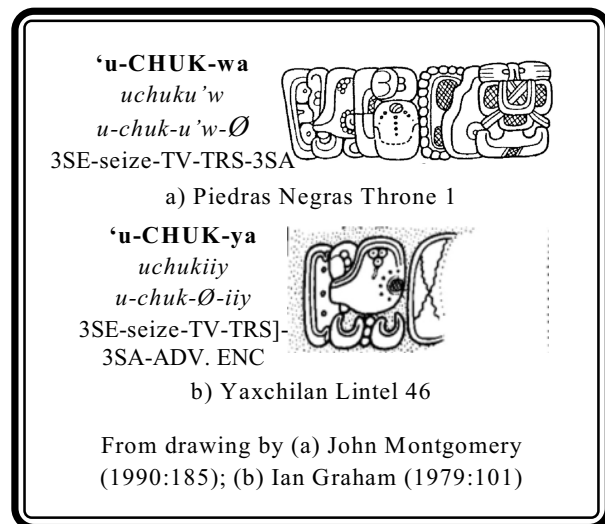


Figure 249. Past temporal deictic enclitic on root transitive verb

mentioned) captured Flint Bat” or “He captured Flint Bat back then.” Either interpretation seems possible. The former would indicate the temporal direction of the discursive back-reference to the nominal referent, *Joy B’ahlam* “Encircling Jaguar” in the previous sentence. The latter would indicate instead a distant-past reference back to a capture by the ruler Encircling Jaguar about 165 years earlier. I believe the former is more likely because the nominal referent of the ergative pronoun immediately precedes the verb and the enclitic is most often used in such discursive back reference contexts. In either case, the active transitive CVC verb is accompanied by the enclitic *-iiy* indicating the temporal direction of the reference.

Interpreting this example as including the form of the enclitic *-iiy* is troublesome for some analysts for two reasons. Some, such as Houston (1997), have argued, based upon the lack of distinction between the incomplete and complete for root transitives in Ch’orti’ and Ch’olti, that transitive verbs in Classic Ch’olan also are not inflected for the incomplete or complete. He, along with Robertson and Stuart (Stuart et al. 1999a, 1999b), have, in the past, also interpreted the *-iiy* enclitic instead as complete inflection. Although Houston et al. (2000b) and Robertson et al. (2004) now interpret the *-iiy* enclitic in Classic Ch’olan instead as past tense, they still maintain that transitive verbs are not inflected for either tense or aspect. Because they rule out the possibility of tense marking on transitive verbs, they strongly disagree that the *-iiy* in this case could be their past tense suffix. Their interpretation of aspect and tense in the Classic Period texts, along with my own, will be discussed in more detail later in Section 7.

I agree that there is no morphological inflection for tense or incomplete-completive aspect on transitive verbs in Classic Ch’olan although I would extend this analysis to verbs of all classes. This particular example is, however, not a problem at all when interpreted in light of the analysis already presented in this study. The temporal adverbial enclitic *-iiy* performs here on a transitive verb just as it does on many other verb forms in Classic Ch’olan. It is an adverb and indicates either a reference back in extratextual time to an earlier event, whether recent or one much further back into the

past, or a reference back in discursive time to a location elsewhere in the text, often in an immediately preceding sentence. When the reference is back in discursive time, the actual extratextual event may even be the same one, with the new comment simply adding additional information about it.

There may be a difference of opinion in the case of the two verbs in Figure 249 as to how the verb roots have been written glyphically. They consist of either a logogram which includes an infixed or conflated reference to what may at one time have been a phonetic complement, so **CHUK-[ku]**, or of two syllabic glyphs, one infixed in or conflated with the other, so **chu-[ku]**. Since I interpret it as the former, the result is ‘**u-CHUK-[ku]-wa** and ‘**u-CHUK-[ku]-ya** which, transcribed become *uchuku’w* and *uchukiiy*. If this is correct, the usual $-V_1$ ’w root transitive status marker is syncopated in the latter example, probably under the weight of the attached enclitic which receives stress as the final syllable. However, neither of these interpretations affects adversely the relevant point here, that this is an example of an active root transitive verb with the past temporal adverbial enclitic *-iiy* attached.

Some have questioned whether **u-CHUK-ya** is writing a verbal form at all. This is the interpretation that has been offered by Houston in Stuart et al. (1999b:105). He identifies it instead as a nominalized antipassive. However, interpreting it as a possessed nominal is difficult to justify syntactically since it is usually the nominal possessor that follows the noun in such constructions. If so, this would make *Etz’nab’ Suutz* the captor instead of the captive. As the information on the Hieroglyphic stairway immediately below this set of lintels corroborates, that is clearly not the meaning intended by the Ch’olan speaking author.

6.5.1.2 On Derived or Non-CVC Transitives

Unlike root transitives, there are many more occurrences of derived transitives with the past deictic enclitic attached. However, many of them are also inflected by the resultative suffix and will be addressed later. An example of one verb, *kab’i*, that does

often have the past temporal enclitic attached, has already been shown earlier in Figure 236. Here in Figure 250 is another example. This form is **'u-KAB'-ya** > *ukab'iiy*. The decipherment offered by Houston and Stuart based upon entries for the stem *chab'i* in Laughlin's (1988:185) Colonial Tzotzil dictionary has now been generally accepted as the most likely although no completely syllabic examples have yet been found. The word *chab'i* is a transitive verb derived by the suffix *-i* from the noun *chab'* and means "guard, oversee" as explained in more detail earlier in Section 4.7.1.

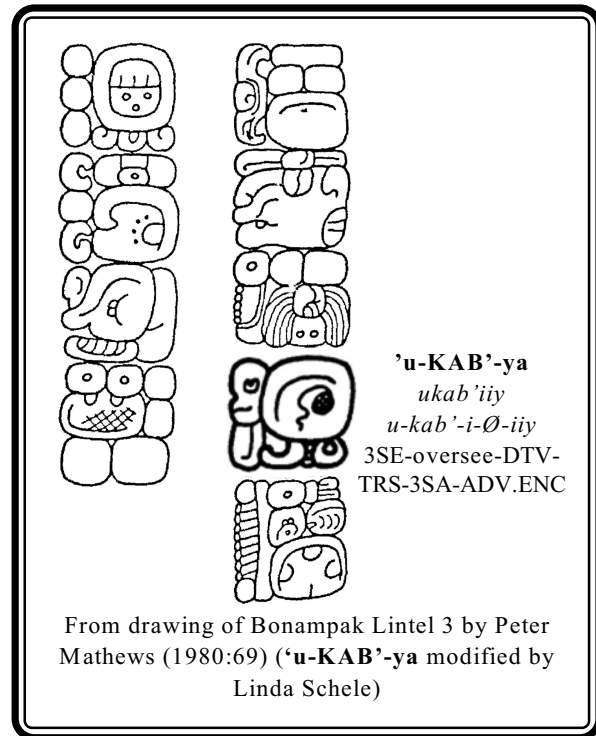


Figure 250. Past temporal deictic enclitic attached to derived transitive verb

What appears in this example is the derived but uninflected verb stem *kab'i* with only the past temporal enclitic *-iiy* attached. There is no further inflection on the verb. Here the ergative pronoun refers back to a capture by *Joy B'ahlam* of an *ajaw* or "lord" from an unidentified polity. The capture was overseen by *aj sak tel winik*, "Person of White?"

6.5.2 On Passives

The two most common forms taken by verbs in the passive voice derived from CVC transitive roots in Classic Ch'olan are represented in Figure 251 and Figure 252.²⁷⁵

²⁷⁵ Although the infix *-h-* is not evident for passives in the inscriptions, there are reasonable ways to justify its absence from the script despite its reconstruction for Proto-Ch'olan. First, it is historically a soft or glottal *h*, and so is more likely to be omitted in particular instances than even a hard or velar *h* (*j*) which itself is omitted on occasion. Second, it occurs here as part of a consonant cluster, making it more
(continued...)

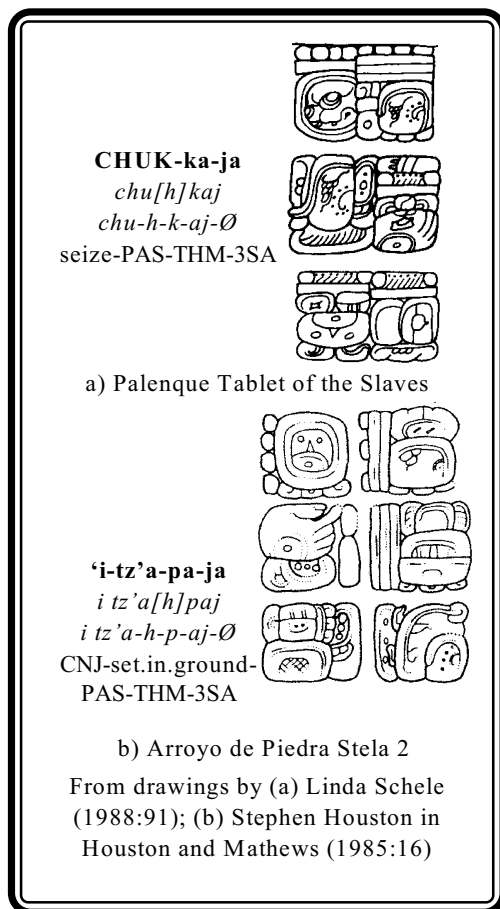


Figure 251. Passive verbs without any temporal enclitics

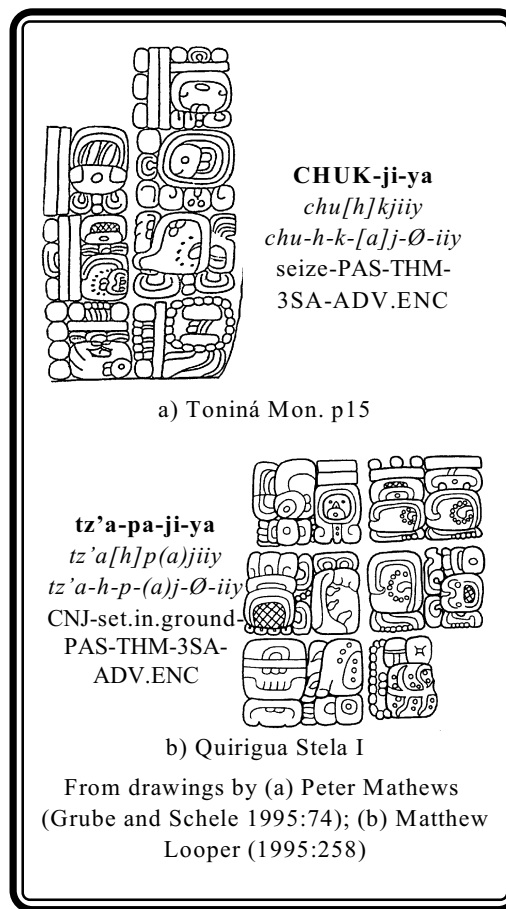


Figure 252. Passive verbs with temporal enclitic *-ijiiy* ∞ *-iiy* attached

The examples in Figure 251 represent the basic passive form with the subject indicated by the unmarked absolutive dependent pronoun. Those in Figure 252 depict the passive forms of the same verbs with the past deictic enclitic attached. The transcribed and reconstructed form *chuhkjiy* is derived from *chu[h]k-(a)j-iiy* which in turn is written glyphically here as **CHUK-ji-ya**. The transcription *tz'ahpajiiy* is derived from the

²⁷⁵(...continued)
 difficult to represent in a system using, besides logograms, CV-syllables to write its phonetic values. It is not likely that the *-aj* suffix, identified as a thematic suffix by Kaufman and Norman (1984:109) and an intransitivizer by Alfonso Lacadena (2004:167) could serve alone as a passivizer on root transitives just as the *-a* suffix does not in Colonial Ch'olti' and Modern Ch'orti'. Because of that, the infix *-h-* is reconstructed here for Classic Ch'olan as well.

collocation **tz'a-pa-ji-ya**. These two spellings of passives derived by the same suffix and with the past temporal enclitic attached raise questions concerning choices of how to transcribe them.

When considering the correct transcription of the **WINIK** glyph and past deictic enclitic compound, we transcribed it as *winikjiiy* partially because there were no syllabically written occurrences of the compound word and a **ki** syllable was never used to attest the presence of an /i/ preceding the /j/. This was more an indication that phonetic forces were likely at work in producing the slightly shorter form rather than a statement that the reconstructible form of the enclitic in that case was not *-(i)jiiy*. While appearing at first glance the same, the problem with the passives hinges instead on a different issue. The **tz'a-pa-ji-ya** > *tz'ahp(a)jiiy* collocation differs from **CHUK-ji-ya** > *chuhkjiiy* in that the latter is written using a logogram, T532 **CHUK** (similar to T515a **chu** with an infix **ku**). Also, the scribe chose not to explicitly write an additional **ka** syllable to provide the phonetic value /a/ needed for an *-ajiiy* suffix although that is done often for passive verbs written with logograms including the *chuhkaj* example written in Figure 251a. *Tz'ahpajiiy* (or *tz'ahpjiiy*) is written completely with CV syllabic glyphs and so the *a*-value is provided by the **pa** syllable.²⁷⁶

The difference in the explicit forms appears to depend not upon the particular verb but rather upon whether the root is written with a logogram or with syllabic glyphs. The **a** that could be used in the transcription of the thematic *-aj* suffix is present when written syllabically and absent when written with a logogram.

²⁷⁶ Note that in the case of the **tz'a-pa** collocations it is not always clear whether the scribe viewed the combination of T68:202 (or T586) as a logogram or as two separate syllables. Most of the time it is clearly syllabic. However, sometimes the combination seems to make sense only as a logogram, such as on Copán Stela B, B1 **TZ'AP-pa-ja** (T66:202.586:181) or Dos Pilas Stela 1, B1 **tz'a-pa-pa-ja** (T66.202:1023.181). The syllabic interpretation seems to force an unwanted repetition of the **pa** syllable. On the other hand, using a syllable which repeats the final consonant of a logogram to supply the required vowel for suffixing is very common as was noted for numbers ending in /n/.

Figure 253 shows two passives, one with the short form of the past temporal enclitic attached (Figure 253a) and the other with the long form (Figure 253b).

Both of these lexemes come from the same inscription (shown below in Figure 286), one with the root written syllabically and the other logographically. The word with the root written syllabically, **pa-k'a-ji-ya** > *pak'(a)jiiy* expressly includes the **a** of *-aj* in its spelling. The compound written with a logogram, **JOY-ji-ji-ya** > *joyjiiiy* does not. While it is easy to understand that

there may be some variation from verb to verb, it does not seem likely that this difference would exist for all verbs and be based upon or exemplified solely by their being written with or without a logogram.

It is highly unlikely that both the syllabically and logographically written transcriptions can be phonetically correct. There is little if any secure evidence that the selection of syllabic versus logographic spellings of roots is based on phonetic criteria. The most perceptible phonetically-driven difference in all these examples of passive forms is the use of a **ji** sign to write the *-j* of the passive suffix and the *-i* of the enclitic rather than the **ja** syllable when no enclitic is present. More likely is that either the **a** was intended to be used as part of the compound, and so would have to be supplied or assumed in logographic spellings, or it was not intended to be used and so would have to be excluded or ignored in syllabic spellings. There is precedent for this as well, exemplified in syllabically written positional collocations such as **pa-ta-wa-ni** > *patwaan*. In this case, it seems that the **a** of the **ta** syllable is not meant to be part of the pronunciation of this lexeme.

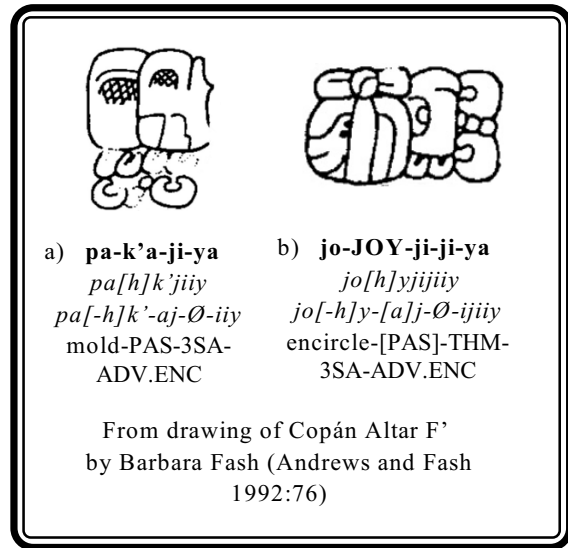


Figure 253. Syllabic and logographic spellings of passive forms with long form of past temporal enclitic

Different evidence such as logograms followed by **Ca** syllables supplying the needed *a*, as is often encountered in passives without the enclitic, would help to tip the scales in favor of inserting or keeping the *a* in the transcriptions. But it is quite significant that there are no examples of an extra **Ca** glyph included when a passive verb whose root is written with a logogram has the enclitic attached whereas there are when the enclitic is not present. If one also considers that there is physically no way to exclude a vowel when writing a CV syllable while a scribe has the option of including a CV syllable after a logogram, the decision is already weighted in favor of not using the **a** of the final **Ca** of the verb stem in the transcription of the whole word.²⁷⁷ At any rate, in these long lexemes that result from the past enclitic's attachment, it is highly likely that the vowel of the stem's suffix is elided in speech thereby creating the variation in the written version that is dependent upon whether the spelling is wholly syllabic or whether a logogram is used to spell the root.

A related issue has to do with whether these passive forms with the past deictic enclitic could be written with an elided *i* and merged *j* of the long version of *-ijiiy* or with the short version in *-iiy* appended to the passive lexical stem. Since the form of the overall compound would be the same either way, I have opted for the short form of the enclitic. This approach is the same as that taken with the transitive resultative constructions and is based upon an Ockham's razor approach, being the least-moves path to the same end.²⁷⁸ This does not mean that the long form is never written on verbs as will be demonstrated later.

²⁷⁷Of course, another option is to conclude that some scribes intended to write these vowels and others did not.

²⁷⁸As noted much earlier in this study, the variation between **ja** and **ji** glyphs in the context of writing passives with and without this temporal enclitic attached provides one of the strongest arguments against "morphosyllables." If indeed **ja** were meant to mark passives or even thematic suffixes or intransitivizers, then a change to **ji** in these contexts would be unsupportable. Choosing instead not to include **ja** as a morphosyllable for this reason not only weakens the acceptability of the morphosyllable theory, but also hints at an untoward selectivity in identification of morphosyllables that matches the circular arguments used in deciding whether or not to apply the theory in actual instances of the identical syllable.

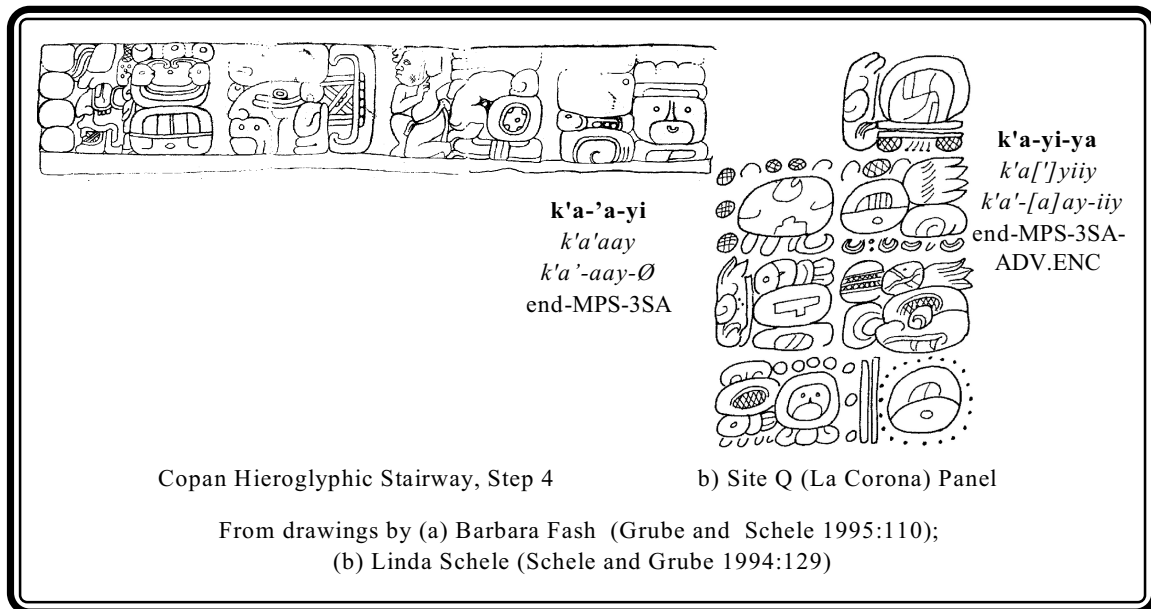


Figure 254. Two examples of $-VV_y$ mediopassive compounds (a) without temporal enclitic; (b) with past deictic enclitic $-iyy$ attached

6.5.3 On $-VV_y$ Mediopassives

This class of verbs and the $-VV_y$ suffix it carries has been examined in detail in Section 3.3.2. As noted, there is some disagreement about how to classify this group of verbs, exemplified in Figure 254, other than by the $-VV_y$ suffix they have in common. During the Classic Period, almost all of them behave clearly as mediopassives. Depending upon the semantic qualities of their roots, their range of meanings varies from almost passive in nature to more like non-mediopassive intransitives. It is this range in meaning that allows some of these sentences to be followed by another which supplies information, usually identifying the person who has overseen or watched over a reported event. These sentences include those with verbs such as *jub'uuy* "get brought down, cut down," and *puluuy* "get burned" among others. Others sentences containing verbs such as *lok'ooy* "leave, go out" and *t'ab'aay* "rise, go up" or "burnish" have not been found with ensuing sentences naming an actor or responsible party. What they all share is the connotation of change of state or motion. The section already referred to should be

consulted for a more detailed and careful analysis using contextual as well as historical evidence.

As for the $-VV_{ly}$ suffix itself, further evidence that it remained a mediopassive suffix throughout the Classic Period can be gleaned from its contrary behavior in Colonial Ch'olti' and Modern Ch'orti'. What was a mediopassive suffix in Classic Ch'olan has, by the time of Modern Ch'orti', become a thematic intransitive suffix. As noted earlier, evidence for this comes from verbs that were clearly root intransitives in Classic Ch'olan and so took the $-i$ intransitive status marker, now take the reinterpreted $-V_{ly}$ thematic suffix/status marker in Modern Ch'orti'. Conversely, some of the same transitive roots that were derived as mediopassives by the $-VV_{ly}$ suffix in Classic Ch'olan now take different mediopassive suffixes but never $-V_{ly}$.

The main purpose here is simply to note the form of the past deictic enclitic on these verbs as a class. Just as in the example in Figure 254b, this form is always the short one in $-iiy$. In Figure 254a, we see the verb as $k'a'aay$ "finish, end" on the main time line of the narrative and in (Figure 254b) as $k'a'yiiy$ in the context of a distance number marked as the earlier of two events using the temporal enclitic $-iiy$.²⁷⁹ Finally, if indeed the mediopassive suffix is $-VV_{ly}$, that is, if it is indeed made up of a long vowel followed by a y , then in those cases in which the enclitic $-iiy$ is attached, that suffix is likely to at least shorten to $-V_{ly}$ but more likely to be elided just as occurs with other $-VC$ verbal suffixes when the enclitic is attached. In this vein, a comparison of the **k'a'a-yi** example and the version with the enclitic **k'a-yi-ya** seems to indicate that the second vowel is indeed elided resulting in $k'a'yiiy$.

²⁷⁹David Mora-Morin (2000:30-31) has presented detailed arguments that the "WING" glyph here is the syllable **k'i** and that the verb in these contexts is $k'iy$ "to spread out." He also suggests that the **yi** syllable might be spelling an $-i(y)$ completive suffix. However, that is quite contrary to all the other contexts in which the **yi** glyph is clearly used to spell the $-VV_{ly}$ suffix as has been already argued in detail. It should also be noticed that the example in 254a is written **k'a-a-yi**. Following Mora Morin's suggestion seems to require completely ignoring the 'a syllable to arrive at $k'iy$. That is a clear indication that the vowel to be used in this word after the root is /a/. Since that vowel would be harmonic the root vowel must also be /a/. Even if one argues that it is not mediopassive, as Mora-Morin does, the 'a syllable still remains unexplained. There is also no evidence that the 'a syllable might have simply indicated a long root vowel in addition to providing the final consonant of the stem, which in this case is a glottal stop.

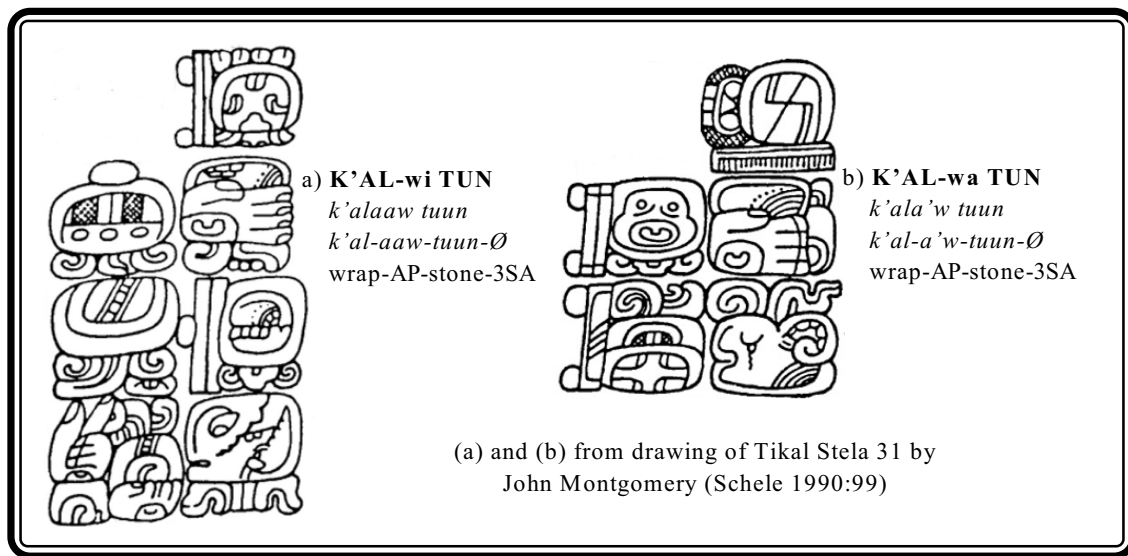


Figure 255. Antipassive forms in $-V_Iw$ written using (a) **wi**; (b) **wa** signs

6.5.4 On Antipassives

6.5.4.1 Antipassives Derived from Root Transitives

Figure 255a and Figure 255b illustrate two examples of antipassives with glyphic suffixes in **wi** and **wa** respectively. As proposed by Lacadena (2000), **wi** and **wa** represent two different ways of spelling the same suffix, that is, $-V_Iw$, or less likely, $-Vw$. Although not mentioned at the time by Lacadena, further empirical evidence for this view comes from an alternate glyphic spelling of a ruler's name, as mentioned earlier, that of *K'ak' Tiliw Chan Chak* of Naranjo. It is attested as both **K'AK'-TIL-wi** and **K'AK'-ti-li-wa**. Since it is doubtful that the ruler's name would vary to the extent of writing two quite different derivational forms. Instead, both versions are likely spelling the same antipassive suffix and represent the same type of antipassive. The two different spellings may, however, indicate two different pronunciations of that same derivational form.

It should be noted that while **wa** is one of the syllables used to write the $-V_Iw$ antipassive suffix, it is also used to write the $-V_Iw$ CVC transitive marker.²⁸⁰ Despite the

²⁸⁰This is another of many examples which show that these glyphic syllables are not connected with specific morphemes or morphological affixes except insofar as they spell wholly or partly sounds that
(continued...)

same glyphic sign being used to write both of these suffixes, there is no danger of mistaking the two for each other. The presence or absence of an ergative dependent pronoun prefix distinguishes them.

What is more, it is even possible, as Lacadena suggests, that it is writing a suffix of the same shape in both cases, that is, $-V_w$ or $-V_l w$ (or $-V_l' w$), whether written with **wi** or **wa**. If the two indicate different pronunciations, **-wa** may be writing $-V_l' w$ and **-wi** $-V_l w$.

Figure 256 shows an antipassive form in $-V_l w$ spelled using **wi** with the $-iiy$ enclitic attached. Although **wi** is also used on verbs that do not have the enclitic $-iiy$ attached, **wa** is not attested with the past temporal enclitic present. As an alternate spelling of this antipassive suffix, **wi** provides the *i* that matches the $-iiy$ spelling of the temporal deictic enclitic.²⁸¹ While it seems

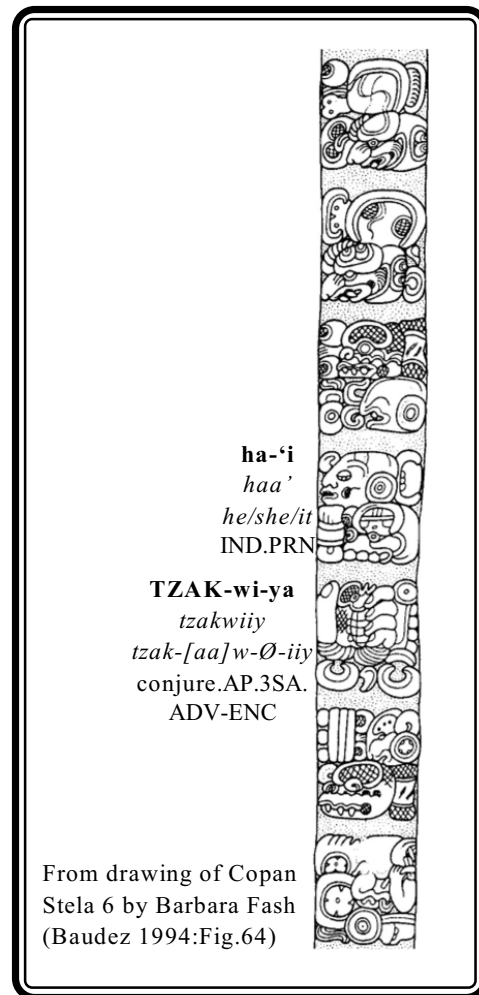


Figure 256. Antipassive form in $-V_l w$ with enclitic $-iiy$

²⁸⁰(...continued)

can be used alone or with others to form morphemes or morphological affixes – just as any glyphic sign does. However, just as in any script, one must be aware of the rules and conventions used to choose the correct spellings.

²⁸¹This would be in line with suggestions that have been made in the past and again most recently by Mora-Marin (2003) and Boot (pers. com. 2004) as possible reasons for the Classic Period scribes' selection of syllables for writing various suffixes. They have both built upon a more general approach for explaining the reasons for scribal selection of the “silent” vowel in the second syllabogram used to spell CVC nouns and adjectives offered by Terrence Kaufman (2003:29-34). That whole approach presents an alternative to the “Theory of disharmony” offered by Houston et al. (1998) and modified by Lacadena and Wichmann (2004). At this point, I am not arguing specifically for any of the proffered approaches. All of them have their good and bad points, but all are an improvement over the traditional synharmony theory according to which all of these vowels were to have matched the root vowel. However, in the particular case of these two suffixes, I believe the empirical evidence for their alternation is convincing. The glyphic
(continued...)

intuitive that only **wi** and not **wa** would be used when writing *-Vw* antipassive suffix along with the past temporal enclitic, such a conclusion must, however, be very tentative because of the extremely limited number of examples available. The only clear example is contained in the passage from Copán Stela 6 which can be transcribed and translated in this way.

‘u-TZ’AK-ka-b’u-ji ‘u-KAB’-ji-ya ‘u-CHAN-nu ti K’AK’-k’a ?-? TZAK-wi-ya WAXAKLAJUN-‘u-b’a [B’AH?] CHAN-nu OCH-K’IN-ni KALOM-TE’
‘utz’akb’uuj ukab’jiiy ucha’n ti k’ahk’ ?? ha’i (haa’?) tzakwiiy waxaklaju’n
ub’aah cha’n ochk’in kalo’mte’

he put it in order he oversaw it, the captor/master on the fire ??. He conjured 18-images-of-the-snake [a god of war], the west *kalo’mte’* . . .

This whole side of the stela, from *utz’akb’uuj ukab’jiiy* on, is written as part of a discursive back reference to what precedes it in the narrative on the left side. It is providing further information concerning the event that was just reported. The verb *tz’akwiiy* takes the antipassive form because of the focus construction. In such constructions, the dependent pronominal subject is pulled out of its usual place attached to the beginning of the verb stem and replaced by an independent pronoun. As is often the case, the name of the person, the nominal subject referred to by the independent pronoun, is provided elsewhere in the inscription. In this case, his name is on the opposite side of the monument (not shown here) although two titles referring to him, *ucha’n ti k’ak’* and *ochk’in kalo’mte’* appear above and below the sentence containing the antipassive with the past temporal enclitic attached.

²⁸¹(...continued)

suffix **wi** can be used both with and without the presence of the temporal deictic enclitic. The suffix **wa** only serves that purpose when the enclitic is not present. Deciding significance of this evidence is difficult because of the sparse amount of data available.

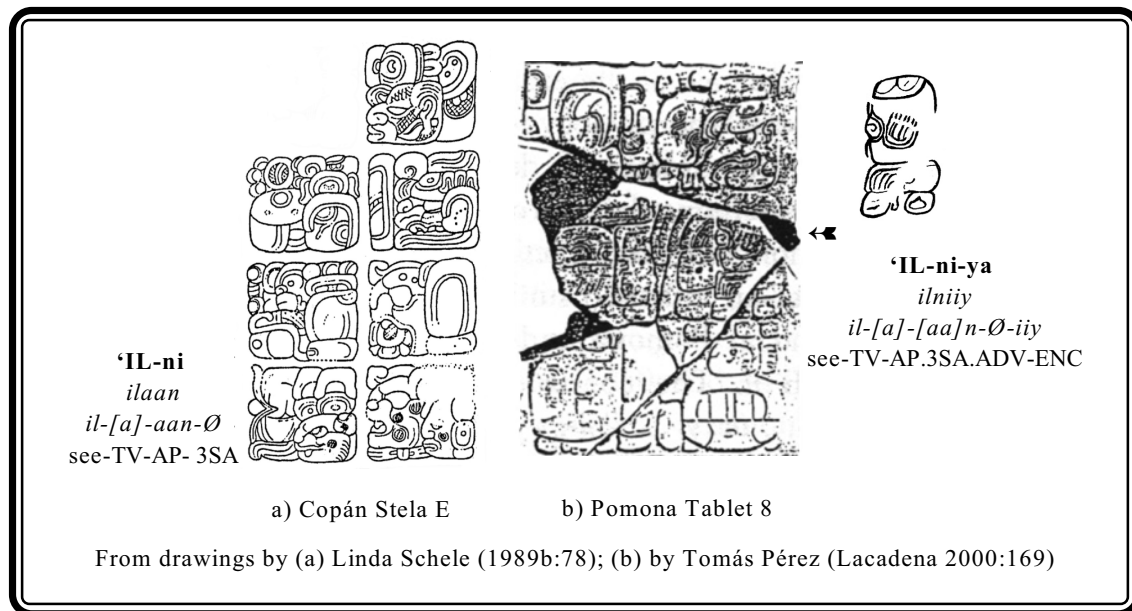


Figure 257. Antipassives in *-aan* (a) without temporal enclitic; (b) with enclitic *-iiy* attached

6.5.4.2 Antipassives Derived from Non-CVC Transitives

The temporal enclitic *-iiy* also occurs on antipassives formed from derived transitives. Figures 257a and 257b show antipassives based upon the non-CVC transitive *il* “to see, witness, attend.” As already noted by Alfonso Lacadena (2000), antipassives of non-CVC verbs are written glyphically by suffixing a **ni** sign. In the Ch’olan and Tzeltalan languages, one of the antipassive derivational suffixes takes the shape of *-an* or *-on*. At least in the case of *il*, the vowel of the *-VVn* suffix is most probably /a/ because the verb *il* almost always includes the vowel /a/ following the root. Thus the antipassive form in Figure 257a is very likely *ilaan*.

The example in Figure 257b shows the same verb *il*, also likely derived as an antipassive. However, in this case, it has the past temporal adverbial enclitic attached as well (cf. Lacadena 2000:169).²⁸² As is most often the case when the enclitic *-iiy* is attached, especially to a stem of two or more syllables, the vowel tends to be elided.

²⁸²Note I am in agreement here with Lacadena that what is written is **IL-ni-ya** *ilniiy*. There is a slight possibility that it may instead be **IL-ji-ya** *ilajiiy* “she/he/it is/was seen, witnessed” which would likely be a passive form instead. However, the **ji** sign is normally a mirror image of the one written here.

Since that is true, the compound formed by the antipassive stem and the enclitic would likely be *ilniiy*. However, it is also possible that it is preserved in this case which would result in a transcription of *ilaniiy instead*. There are examples of other constructions with this verb that explicitly write an **'a** syllable following the logogram. However, since no examples of antipassives have been found with it, the former transcription is the most probable.

Figure 258 shows an example of an antipassive derived by the suffix *-an*. The positional root *pat* is first derived as a transitive by the suffix *-b'u*. The *-aan* suffix derives this transitive verb as an antipassive. In this type of focus construction, the 3rd pers. absolutive still refers to what would otherwise be the object, in this case the throne. Finally, the *-iiy* temporal enclitic is attached to show the temporal direction of the referent of the independent pronoun *hiin*. As

is often the case, the length of the lexeme combined with the usual stress on the last syllable causes the vowel of the antipassive suffix to elide giving *patb'uniy* as a result.

The whole passage including the one leading up to this antipassive verb (see Figure 239 for an illustration of the first part) can be transcribed and translated as follows:

Huk ak'b'al uhtiyy k'in uwitzil pipa' chan ch'e'n. Hiin patb'uniy b'ahlam tz'am te' b'a tok' b'a

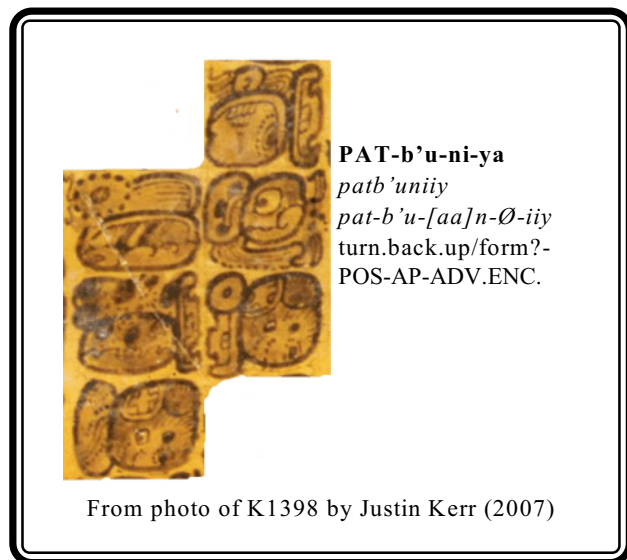


Figure 258. Derived transitive verb further derived as antipassive in *-aan* with *-iiy* enclitic attached

“On 7 *Ak'b'al* it happened, on that day, at the mountain of the Forest Falcon Lake sky cave. **I overturned** it [back then?] the jaguar throne. There were wood strikes and flint strikes.”

The root *pat* has a variety of meanings both as a noun and a verb. In most cases in the Classic texts, the desired meaning of the usual intransitive positional is “be done, made, formed, built.” In the Figure 258 antipassive example, I believe an alternative meaning of the same root “turn face down” or literally “turn back side up” is the most appropriate (cf. Wald and Carrasco 2004). This meaning is attested in both Colonial and Modern Tzotzil and corresponds to the derived transitive version of Laughlin’s (1975:268, 1988:282) intransitive “to lie face down.” The speaker, we think the 12 ½ year old *K'ak' Tiliw*, is here taking credit for overturning a jaguar throne in a battle. That this refers to a battle is indicated by the presence of a common kenning for “battle” *te' b'a tok' b'a*, used especially in the Dresden Codex Venus Pages and in the Paris Codex *K'atun* Pages. One might also translate this as “wood images, flint images” as does Kerry Hull (2003:420), but in any case, it usually occurs in connection with battles or war. So, even if one prefers “formed/built the jaguar throne,” the connection with war still seems the most likely.

6.5.5 On Intransitive Positionals

Figure 259 shows two passages with the same intransitive positional verb derived by a *-waan* suffix. Because the verb in Figure 259b is part of a clause providing information concerning the length of time between the restated event and the following one (not shown), it has the past temporal deictic enclitic attached indicating the temporal direction of the relationship. So far, only the short form of the enclitic is attested on positionals in *-waan*, so the verb with the enclitic is *chumwaniiy*.

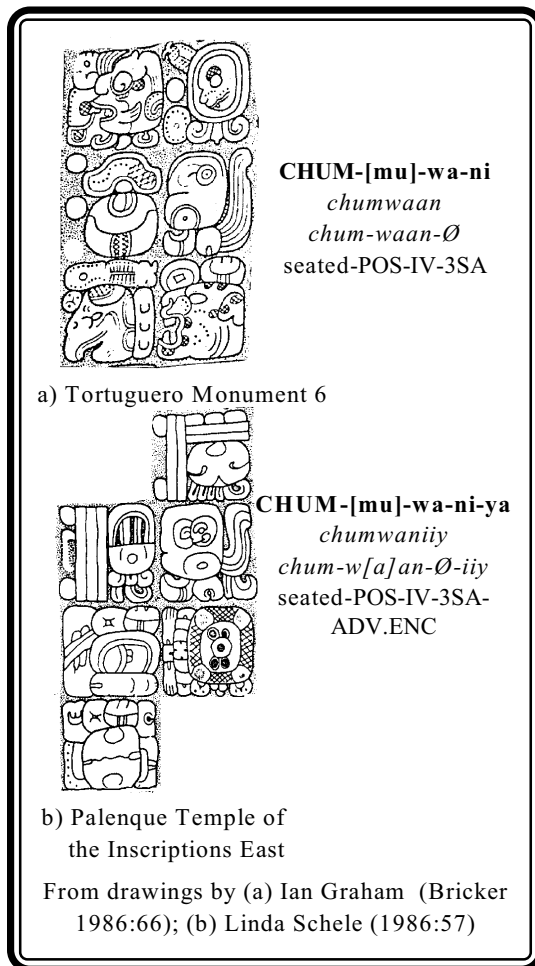


Figure 259. Positional in *-waan* (a) with no additional attachments; (b) with past deictic enclitic *-iiy* attached

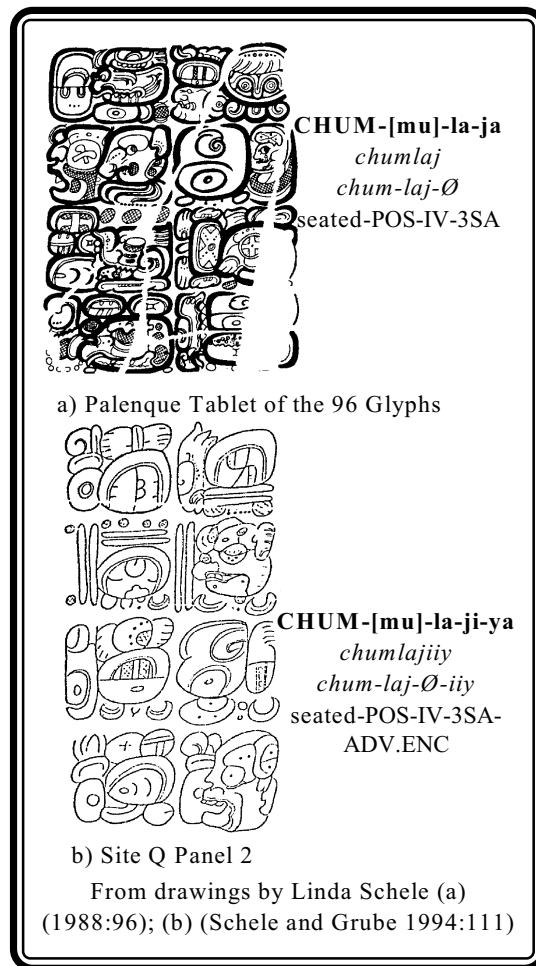


Figure 260. Positional in *-laj* (a) with no additional attachments; (b) with the past deictic enclitic *-iiy* attached

Figure 260 shows two similar passages, except that the derivational suffix used on the verbs is *-laj*. This form of the positional also takes what is likely the short form of the enclitic in *-iiy* because the *-j-* preceding it can always be accounted for as the final /j/ of the positional suffix. In this respect, the enclitic behaves the same as it does on *-hCaj* passives and transitive resultatives in *-VVj*. Any proposal that suggests a merger of the *-j* of the suffix with the *-j* of the enclitic *-(i)jiiy* would be impossible to prove given the existence and use of the *-iiy* alternate form of the same enclitic on other verb classes.

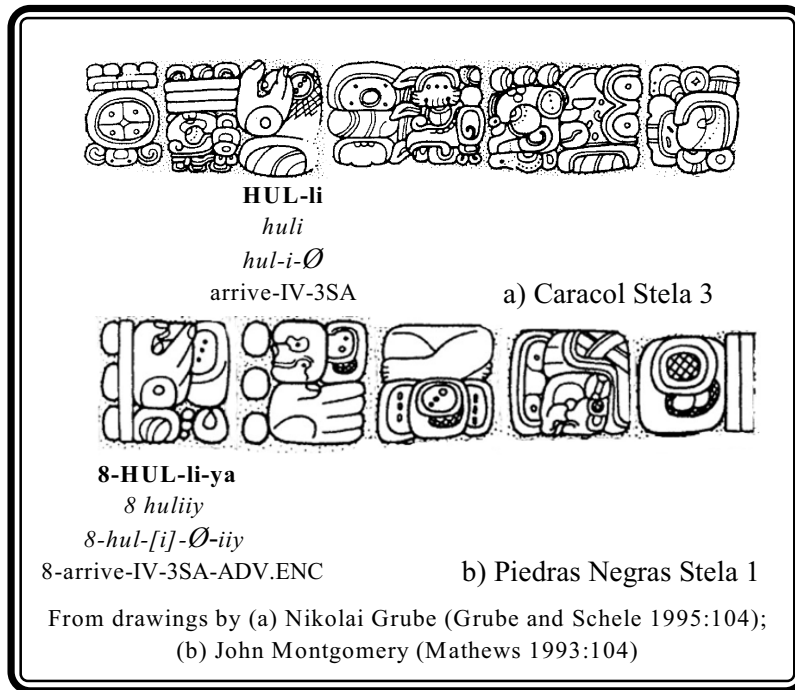


Figure 261. Root intransitive verb (a) without temporal enclitic; with temporal enclitic *-iiy* attached

6.5.6 On Root Intransitives

Figure 261 shows examples of the root intransitive verb *hul* both with and without the temporal deictic enclitic *-iiy* attached. The first passage, Figure 261a, reports the arrival of Lady “*B’atz Ek’*” at Caracol (*Ox Witz Ha’*). The verb *huli* is written as the root plus the root intransitive marker.

The passage in Figure 261b illustrates an example of a common type of passage in initial long counts. It provides information concerning the moon on the date indicated. In this case from Piedras Negras Stela 1, it states “Eight [days] ago arrived the 3 ‘skull moon’” and then proceeds to provide its name and the information that it was a 30-day lunation. The past enclitic provides the information concerning the temporal direction of the referent, the event of the moon’s actual arrival nine days earlier. It is important to note here that the enclitic is **not** attached to the number 8, but instead to the verb itself. It can attach to numbers but that is not the case here nor in many other examples. Of course,

considering the type of enclitic it is, it can and most often does modify the whole clause and not directly the individual word to which it is attached. Further evidence that the enclitic in such contexts is meant to be attached to the verb comes from examples such as in Figure 262 where it appears on both the distance number and the verb *huli* itself resulting in *ho 'laju 'nijiij* *huliij*.

Because of its frequent use in the context of distance numbers, there are many examples of the verb *uht* both with and without the past temporal enclitic attached. It is

almost always the short form of the enclitic, *-iij* as shown in Figure 227, that is attached to the lexical stem of CVC intransitives and similar verbs such as *uht*.²⁸³ The '*i-u-ti-ya*' examples there can be transcribed *i uhtiij*. More examples of root intransitive verbs with the enclitic *-iij* attached were shown earlier in Figure 232, which includes both *uhtiij* and *chamiij*. The *-i* that appears on root intransitive verbs even without the enclitic attached is a status marker. It is an indication that it is a root intransitive verb and, as such, is not inflection. When this temporal enclitic is attached, the *-i* of the verb and the *-ii* of the enclitic merge and so the status marker is not reflected separately in the transcription.

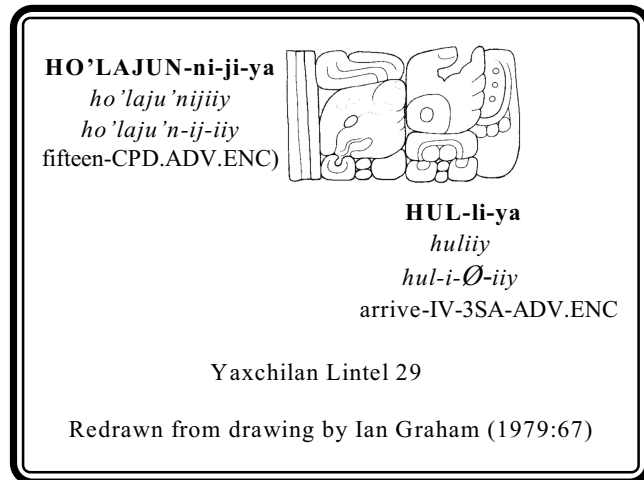


Figure 262. Past enclitic on both distance number and verb *huli*

²⁸³There are, however, rare exceptions to the usual forms on root and derived intransitives and these will be addressed in Section 6.5.9.2.

6.5.7 On Verbs with Transitive Resultative Inflection

Up to now the examples of the past temporal enclitics shown in this section (6.5) have been attached to root or derived verb stems that included the derivational suffixes or status markers and the 3rd person singular dependent pronoun. The passage in Figure 263 shows a common example of the enclitic used with the verb

ukab'i that adds a new dimension. The passage from Seibal includes this verb derived as a transitive by the suffix *-i* and with the enclitic *-iiy* attached but preceded by the resultative *-[i]ij* inflection. The 3rd person singular dependent pronoun refers back to the previously reported event, *ochi k'ak' tu muknaal k'an mo' b'ahlam k'uh(ul) Ux? Tuun?* (Seibal) *Ajaw*” “Fire entered into the tomb of Yellow Macaw Jaguar holy Seibal lord.” This is followed by the next sentence *'ukab'jiiy Ich'aak B'ahlam*, “He oversaw it (“was in the state of having overseen it”), Jaguar Paw, holy Seibal lord.”

That the past enclitic *-iiy* can be attached to a verb already inflected by an aspectual suffix makes it much less likely that it is itself an inflectional suffix indicating either past tense or completive aspect. Although that grammatical situation alone would not be enough to prove that *-iiy* here is indeed not aspect or tense inflection, it is nevertheless another of many factors that point towards the likelihood of its character as an adverbial enclitic.

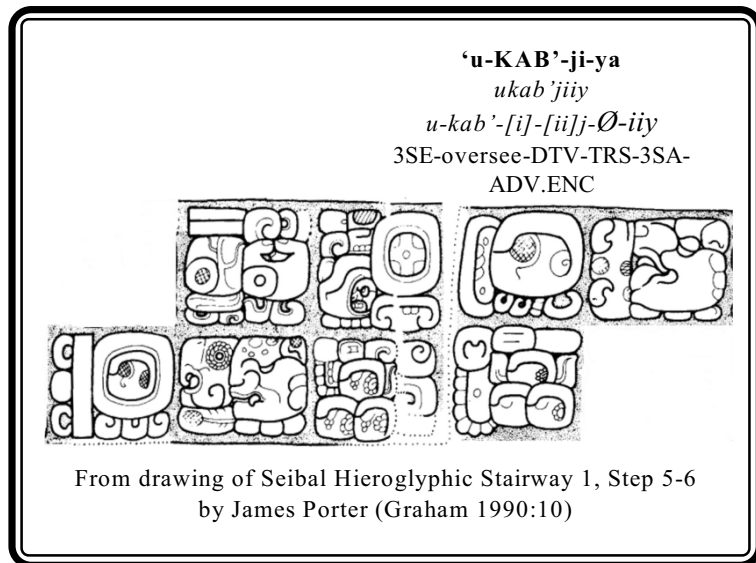


Figure 263. Past temporal enclitic attached to derived transitive verb inflected for resultative aspect.

We have already seen another derived or non-CVC verb that occurs with the temporal deictic enclitic. That is the verb *il* "to see, witness, attend." Figure 264 shows an example of **yi-li-‘a-ji-ya** *yilajiiy* in a distant past context "He/she witnessed it back then."²⁸⁴ Because this compound is spelled out completely syllabically and the *a* vowel is not

harmonic, it is likely that the /a/ is not meant to be elided in transcription or pronunciation. However, this verb only rarely appears with the *-iiy* enclitic attached although the contexts in which it appears are otherwise somewhat similar to those in which *ukab’jiiy* appears. In fact, in this passage, *yilajiiy* occurs with the resultative whereas in the parallel passage (shown earlier in Figure 242) *ukab’iiy* actually occurs without the resultative inflection but with the past enclitic. As stated earlier, it is the distant past connotation "back then" that has likely driven the appearance of the enclitic on both verbs. However, only the *yilajiiy* passage exhibits the connotation of the resultative stressing the status of the actor as a result of watching over the period ending.

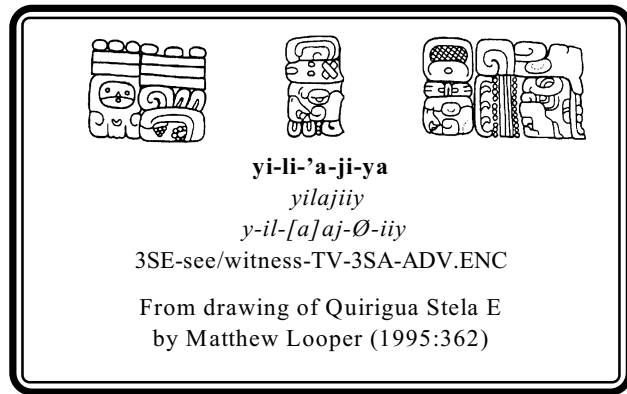


Figure 264. Past temporal enclitic attached to irregular transitive verb inflected for resultative aspect

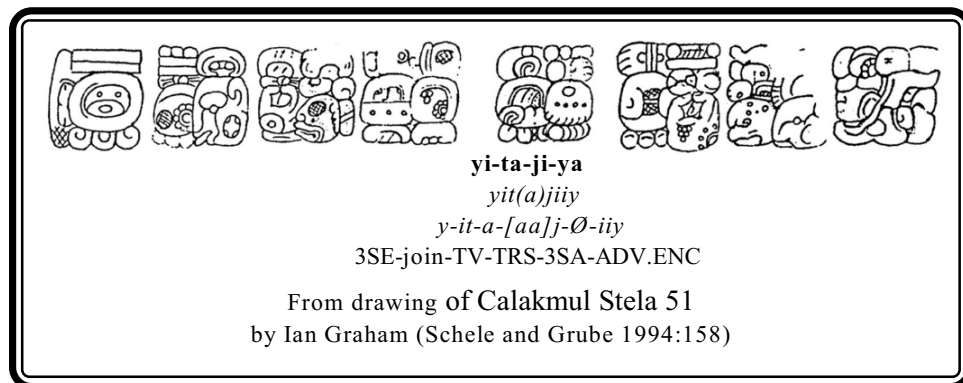


Figure 265. Rare example of past temporal enclitic attached to irregular intransitive verb *it* inflected for resultative aspect

²⁸⁴This passage from Quirigua Stela E was shown in its wider context earlier in Section 6.3.6.2.2.

Another irregular transitive verb with a VC ('VC) root that behaves in much the same way is *it* "to join, accompany." It occurs often inflected for the resultative and serves, as do *ukab'ij* and *yilaaj*, to add information about an event or person mentioned in a previous passage. Quite unlike *ukab'ij* but like *yilaaj*, it very seldom occurs with the temporal deictic enclitic attached. The example of **yi-ta-ji-ya** from Calakmul Stela 51 in Figure 265 is rare and perhaps unique. It is not immediately clear from the context why the enclitic should be present in this case while it is absent in all the others. There is no indication of any distant past context as in the Quirigua Stela E passage in Figure 264. Nevertheless, no theoretical problems are raised by the presence of the past enclitic because there is clearly a back reference created by the 3rd person absolutive pronoun in *yit(a)jiy*. The name of the person who is the nominal referent of the pronominal object appears in the previous sentence. The past temporal enclitic can be and often is present in discursive back references such as this.

The pattern of the enclitic *-iiy*'s occurrence with these three verbs, namely its frequent occurrence with *kab'i* and its rarity with *it* and *il*, does provide **further supporting evidence that *-iiy* is likely not a verbal morphological suffix indicating completive aspect or past tense**. The contexts in which all three occur is quite similar. And yet only *ukab'iiy* and *ukab'jiy* occur quite regularly while *yilajiy* and *yit(a)jiy* are extremely rare. If *-iiy* were indeed aspectual or tense inflection, one would not expect it to behave so differently with the three verbs considering the similarity of the contexts. What is more, especially the alternation that occurs between *ukab'ij* without the past temporal enclitic, and the two forms *ukab'jiy* and *ukab'iiy* with the enclitic, would be especially difficult to understand if *-iiy* were indeed a morphological suffix rather than an adverbial enclitic. Not only are the contexts quite similar, but even the verb itself is identical, making it difficult if not impossible to explain why in some cases the authors would use completive aspect or past tense and in others not. Once one concludes, based upon other evidence that has already been presented, that *-iiy* is an adverbial enclitic, its absence in some cases and its presence in others is quite understandable. As an adverb, it

can aid in understanding the author's message and it can help the flow of the narrative by making it easier to follow. But it does not have to be present in this type of context to make sense syntactically or grammatically.

6.5.8 On Gerunds

Up to now examples have been brought of the enclitic *-ijiiy* ∞ *-iiy* attached to a wide variety of verb stems. Some of these stems consisted of verb roots along with their status markers indicating root (CVC) transitive or root (CVC) intransitive verbs. On these stems, the *-ijiiy* ∞ *-iiy* morpheme could have theoretically been interpreted as either a tense/aspect suffix or a temporal enclitic, if other evidence already presented were not taken into account. A verb already inflected for tense or aspect cannot have a different tense or aspectual suffix added. The last section noted that *-iiy* often occurred on verbs inflected for the transitive resultative. The presence of so many examples of that kind provides evidence that *-iiy* is indeed an enclitic and not past tense or completive aspect.

Just as improbable would be the presence of tense or aspectual inflection on nouns or nominalized verbs such as participles or gerunds. Nevertheless, there are examples of gerunds, nominalized verbs, that have the temporal deictic enclitic *-ijiiy* ∞ *-iiy* attached.

One gerund which occurs twice in very similar contexts on the Palenque Palace Tablet is shown in Figure 266. *Lajcha'* [*k'in*] *ju'n*

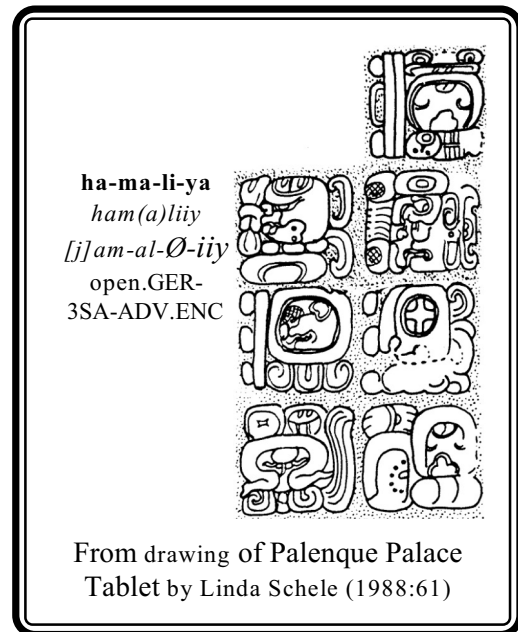


Figure 266. Past temporal enclitic attached to gerund

*winik lat hamliiy [jamliiy?] usakhu'n waxak ok ux k'anasiy ahawyan suku winik.*²⁸⁵

“Twelve days and one 20-day month **earlier** [was] the opening of his [*Janaab' Pakal*’s] white headband; on 8 *Ok* 3 *K'anasiy* he was seated as lord, the older brother person. The reference back to the previous event, the death of the ruler *Janaab Pakal*, is made by the 3rd singular ergative pronoun on the noun *sakhu'n* “white headband/paper.” The direction of the temporal reference is indicated by the *-iiy* enclitic on the gerund *hamal*.²⁸⁶ The 3rd person singular absolutive pronoun that is unmarked on the gerund in the verbless sentence refers back to the previous mention of the death of the previous ruler. It does so even though the report of the death was made using a different verb.

The importance of this passage rests not in the pattern itself, but in the use of the enclitic on a gerund. Gerunds are nominals and so do not take past tense or completive aspect suffixes the way verbs do. Even Morán (1935a:7) stressed the difference between “tenses” (“*tiempos*”) in verbless sentences and those tenses on verbs.²⁸⁷ That this enclitic occurs on gerunds in precisely

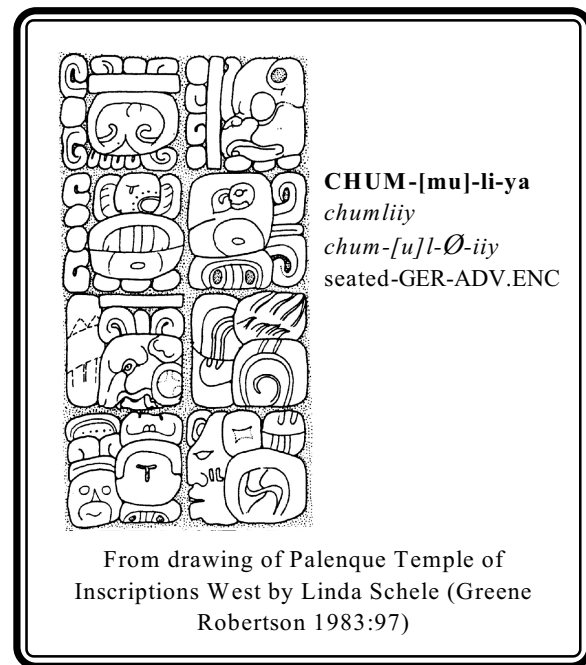


Figure 267. Past temporal enclitic attached to positional gerund

²⁸⁵The transcription *ham(a)liiy* is not entirely without controversy since one would expect the word to begin with /j/ and not /h/ (see Grube 2004a:73). Colonial Tzotzil (Laughlin 1988:205), which does maintain the /h-j/ distinction, attests it as *jam*.

²⁸⁶An interesting side note is that instead of the enclitic *-ijiiy* ∞ *-iiy* appearing here on *winik*, the adverb *lat* with a similar meaning is used instead. Of course, since *lat* can replace *-ijiiy* in these contexts, such examples militate against the analysis of *-ij* as a word meaning “day.”

²⁸⁷Under the heading “Del verbo sum es fui” he states “No le ai en esta lengua en propria voz . . .” “They do not have it (*tiempo* ‘tense’) in the proper sense of that word. . . .”

the same contexts with the same effect in these verbless sentences is a clear indication that *-iiy* is not a tense or aspect marker.

Another example of a gerund to which the enclitic *-ijiiy* ∞ *-iiy* is attached occurs on the West Panel of the Temple of the Inscriptions at Palenque (Figure 267). As with the previous example, it appears twice in this inscription in very similar contexts. Again, they occur in the context of distance numbers. In the example in Figure 267, the **WINIK** glyph takes the **ji-ya** signs for the *-jiiy* adverb instead of the alternate **la-ta** *lat*. In this case the verbless sentence besides the distance number is *chumliiy ta joyaj* “It was one [day], 6 twenty-day months, 7 years, and 2 twenty-score years after her seating as companion and then it ended her white breath? Lady *Tzak* Lord.”

The woman whose death is reported here was the wife of *Janaab’ Pakal* who was buried beneath the building on which this panel hangs. The reference to her seating in office as royal companion is recorded using a gerund in a verbless sentence. The 3rd person singular absolutive pronoun refers back to the event in the previous passage (not shown), her betrothal to the ruler *Janaab’ Pakal*. It would be highly unusual for a nominal to take a verbal suffix whether it be for past tense or completive aspect. Therefore this occurrence adds still more to the evidence that *-iiy* is not inflection but rather a temporal adverbial enclitic.

One additional example of a gerund with the enclitic *-ijiiy* ∞ *-iiy* attached appears on Copán Altar F’. That gerund is *hulel* and it appears in the form *hulelijiiy*. Since it is included in Figure 286 and since the inscription in which it appears will be discussed in detail in Section 6.5.9.2.4, it will not be commented upon further here except to note that it too serves as a gerund, in that case derived from a root intransitive verb and, as such, would not be amenable to taking a tense or aspectual suffix. Thus the *-ijiiy* that is attached to it is instead the past temporal deictic enclitic, this time in its longer form.

6.5.9 Long Allomorph of Past Temporal Enclitic *-ijiiy* ∞ *-jiiy* Attached to Verbs

6.5.9.1 Problematic Examples Not Counted as Long Versions of Past Enclitic

It has already been established in Section 5.2.3 that the long allomorph of the past temporal enclitic is explicitly written for numbers ending in *-n* in Classic Ch'olan. It also clearly occurs in the slightly shortened long form as the *-jiiy* that is written on numbers ending and time-period nouns ending in /k/ and sometimes on *haab'*. The question to be addressed at this point is whether either of these two longer forms of the temporal deictic enclitic *-ijiiy* or *-jiiy* occur attached to verbs. It should be noted that what is being referred to here are not the many instances in which the form *-jiiy* can be explained as occurring due to a final /j/ in the verb stem to which the enclitic is then attached. None of those will be considered here as incorporating the longer form of the enclitic. This approach is being taken despite the theoretical possibility that a possible merger of the final /j/ of a verbal suffix with the /j/ of the past temporal enclitic could result in a *-jiiy* form that, at least superficially, mimics the long form. The problem is that in these cases, proof of the long version's presence is not demonstrable. This rules out consideration of examples of the passives ending in *-aj*, transitive resultatives ending in *-VVj*, and positionals ending in *-laj* that occur with the attached enclitic as just shown in Sections 6.5.2, 6.5.5, and 6.5.6. This also rules out some examples of the enclitic attached to other stems with suffixes that end in the consonant /j/.

6.5.9.1.1 Problematic Example: jo-ch'o-ji-ya

There are other examples of verb forms to which the past temporal enclitic is attached for which ruling out the long form is not as straightforward. Two of them will be examined here. Both of them involve passive stems but present slightly different problems. The first one is shown in Figure 268.

The passage occurs in the context of an 819-day count and has to do with the drilling of a fire: *wuk winikjiiy jo(h)chjiiy uk'ahk'il* [name] “6 twenty-day months earlier it was drilled, his fire, [name].” The context is that of a distance number with the usual appearance of the past temporal enclitic on both the time-period noun and the verb.

What is different here is the spelling of the verbal compound **jo-ch'o-ji-ya**, especially in the choice of the last syllable used to write the

root. Almost always in syllabic spellings of passives, the vowel of the last syllable in the root supplies the vowel needed for the thematic *-aj* suffix. In this case and a few others, a syllable whose vowel is synharmonic with the root-vowel is used instead. Because of that, it may appear at first glance that the **ji-ya** is spelling the long form of the enclitic.

Instead, since the /a/ of the suffix is elided because of the attachment of the enclitic, the scribe uses a syllable with the same vowel as the root and intends it to be passed over in the reading or pronunciation of the word. However, the **j-** of the **ji** syllable is writing what is present from the thematic suffix of the passive form. The spelling of the last consonant of the root with a **Co** syllable (here **ch'o**) instead of a **Ca** syllable (here **ch'a**) follows a pattern similar to that used when spelling intransitive positionals syllabically. The synharmonic vowel used to write the final consonant of the root is not used in the pronunciation of the word. The difference is that in the case of the positionals, there would not normally be a vowel intervening between the root and the intransitive derivational suffixes. However, in the case of *joch'*, there would be a pronounced /a/ in the passive form if the enclitic were not attached. Since the enclitic is present, only the *-j* and not the *a-* of the thematic suffix is required. It is, then, the *-j-* of the thematic suffix

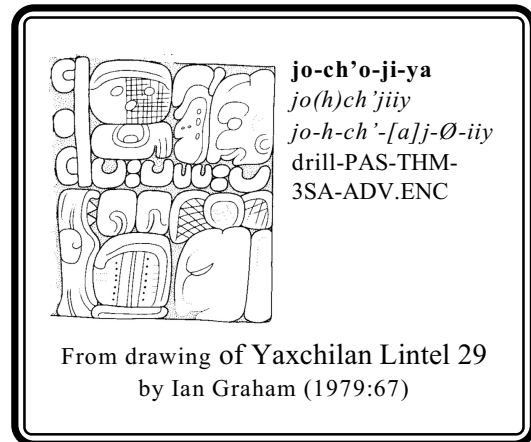


Figure 268. Passive form with enclitic and unexpected harmonic vowel in last syllable used to write root

that the **ji** writes. What then remains is the short allomorph of the past enclitic. Since the enclitic begins with an /i/, the syllable **ji** is used instead of **ja**.

6.5.9.1.2 Problematic Example: ma-'AK-ja-ji-ya

A different and more complex problem is posed by the example in Figure 269, **ma-'AK-ja-ji-ya** to spell either *ma[h]kajiiy*, as rendered in the figure, or *ma[h]kjiiy* if one decides that the *-a* of the passive form's thematic suffix is not to be pronounced when the past temporal enclitic is attached. The **ja** syllable is rarely present in such passive constructions with the past enclitic even if, as in this case, a logogram is used to spell the root. Instead, the *j* supplied by the **ji** syllable is considered enough to spell the word correctly. In other words,

it writes the *j* of the passive thematic and so the additional **ja** syllable is probably superfluous. The question remains as to why both the **ja** and the **ji** are present in this and a few similar examples. There are, of course, examples of spellings of the passive forms of root transitives, especially when logograms are used to write the root, that use a glyphic syllable with the same consonant that ends the root but with a vowel that writes the *a* of the passive thematic suffix. This example is similar but one step further removed. The **ja** is present as it usually is on passives but the **ji** is also present because it matches the *j* of the *-aj* thematic and also supplies the *i* required for the enclitic *-iiy*. Thus, despite appearances, it is not necessary to conclude that the *j* written by **ji** is part of the long form of the past temporal enclitic. Whether or not the *a* of the *-aj* thematic suffix

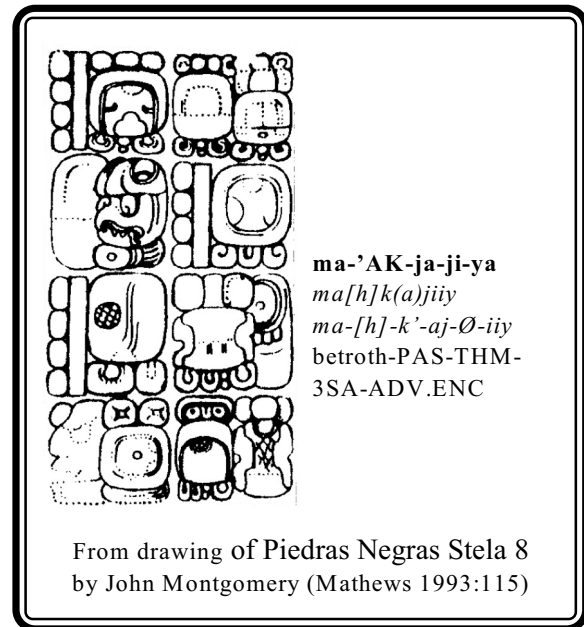


Figure 269. Passive suffix written with both **ja** and **ji** although only latter required

is meant to be pronounced as the spelling seems to indicate is a different issue. Since it is most often not present in similar circumstances with a relatively large number of words, it may be that the scribe in this and similar cases is indicating precisely that.

6.5.9.1.3 Problematic Examples: Writing Strategies Used to Write Forms of *wa'* Positional

Another verb exhibiting some unusual formulations that might be misinterpreted in the context of past temporal enclitic attachment is the positional *wa'*. However, before analyzing these forms, some discussion is needed concerning the identification of the root involved and the value of the logogram often used to write it. There is general agreement as to the type and meaning of the verb that is written here. It is a positional with a core meaning of “standing, set up, be in an erect position.”²⁸⁸ Nikolai Grube (1989b)

identified T588 as a logogram with the value **WA'**. One of the examples that helped him verify this identification, from Stela 9 at Copán, is shown in context in Figure 270. It provides good evidence as to this verb's general shape. If one simply transliterates the syllabograms and leaves out the logogram, the result is **wa-la-ja**. However, the **wa** is clearly a phonetic complement for **WA'**. The **la** writes the first part of the positional suffix *-laj* and the **ja** completes it.

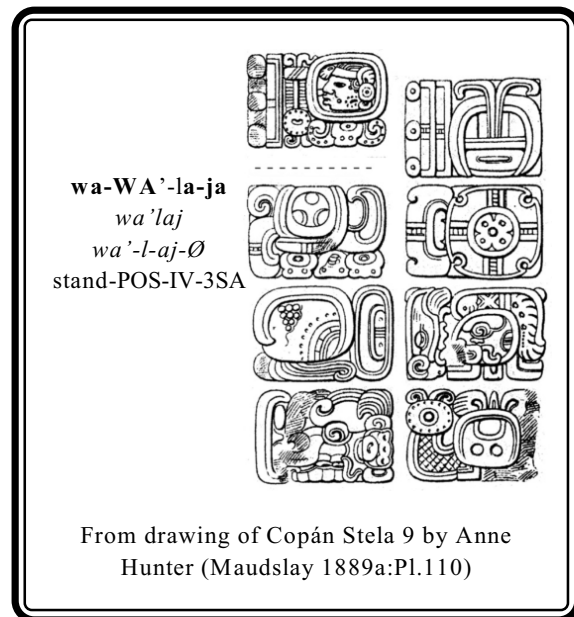


Figure 270. Positional verb *wa'laj* preceded by phonetic complement

²⁸⁸Exactly the same glyphic construction appears in the Dresden Codex on pages 30b and 32a. These and many other appearances of this verb in the Dresden Codex provide further evidence that this is a positional verb with the general meaning of “be in a standing/upright position.”

Kaufman (2003:1417) reconstructs the Proto-Mayan form of the verb root as *wa'* and that is likely the basic form of this root in Classic Ch'olan as well. Further evidence of this comes from the form *wa'* as a positional meaning “be in a standing/upright position” in all of the Ch'olan languages as well as in Tzotzil. For example, Wisdom (1950:754) defines *wa'* as a verb meaning “being, being in a place or condition” and *wa'ar* as an adjective meaning “standing, stood up, erect or erected, perpendicular, spot, place, locality, be, be in a place, there is (are).” Hofling and Tesucún (1997:658) have also documented *wa'* as a positional root with a similar meaning in the Yukatekan language Itzaj. Bricker et al. (1998:299) list *wa'al* as a positional verb in Hocabá Yukatek. Kaufman (2003:1416) does indeed reconstruct a Common Mayan form **wa7.Vl(-ik)*, variations of which occur in several Mayan languages including the Ch'olan family.

Grube (1989b) includes a passage from Copán Censer #244 shown in Figure 271 which includes this verb in a participial form *wa'an sak lak tuun* “[It is] the standing/upright white stone container.”²⁸⁹ This matches the Ch'orti' participle *wa'an* “rising, standing, straight, be standing or straight” (Wisdom 1950:754).

Figure 272, showing a passage from Toniná M74, illustrates the usual way this

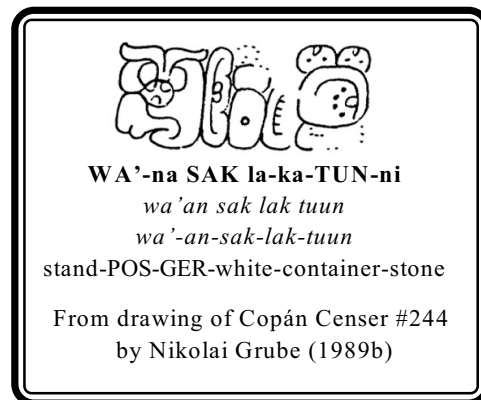


Figure 271. Participial form *wa'an*

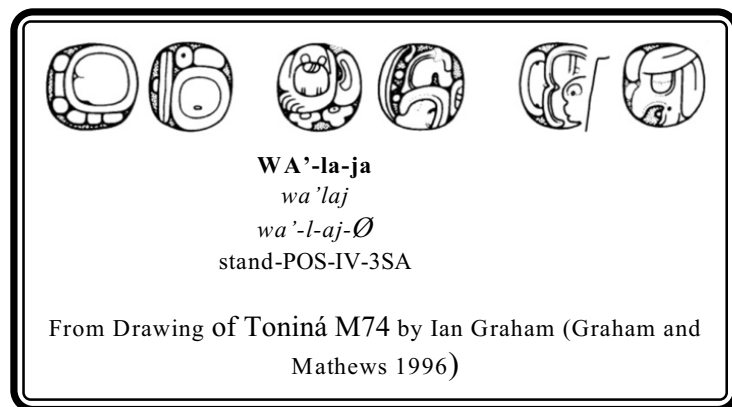


Figure 272. Usual way to spell *wa'laj*

²⁸⁹The identification of *sak lak tuun* as a censer was made by David Stuart (1986).

verb form is written when it occurs without the past temporal deictic enclitic attached. **WA'-la-ji** *wa'laj*. The clause *wa'laj ulakam tuunil* can be translated as “on ?? (date) it was set-up (or “standing”), his/her large stone” Note that the sense of this verb form is not to be understood as passive but rather as simply an intransitive indicating a state or position the subject, the stela, was in as of that particular day.²⁹⁰ The signs **la** and **ja** are used to write the suffix *-laj*.

Problems concerning the identification of the T588 logogram's value arise from spellings such as some from Palenque and Yaxchilan, an example of which from the Palenque Temple of the Sun Tablet is shown in Figure 273. Because there is no **la** syllabogram present, it seems one would either have to hypothesize the presence of a final **L** in the logogram, identify a form of an intransitive positional suffix without either a *-laj* or *-wan* suffix, or decide that it was not serving to write a positional form.

In light of examples such as this, some have suggested that the logogram has instead the value **WAL**. There is some evidence that this could be the case. For Colonial Yukatek, Bolles (2001:3644) defines *uaan* (*wa'n*) as “standing upright, erect, from *ualaan*” and so as a contraction of *ualaan* rather than as a form of *wa'* plus *-an*. Taking a different view than presented so far, Bolles (2001:3667) identifies *ual* (*wal*), instead of *wa'*, as the verb root meaning “to stand erect, and by exten[s]ion to stop.” The

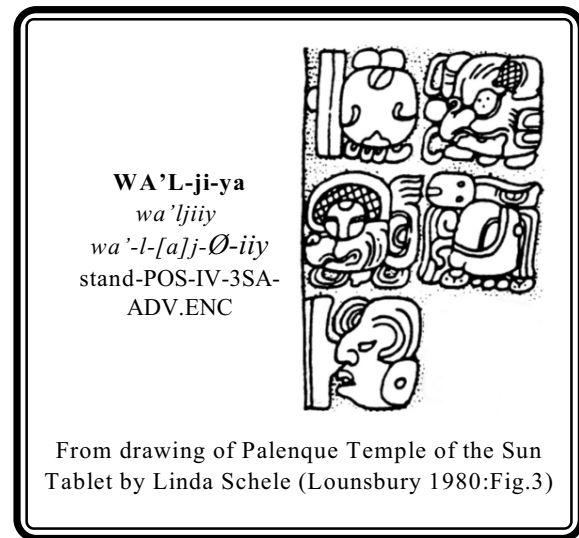


Figure 273. Variant spelling of *wa'* plus past temporal enclitic

²⁹⁰The English translation here is meant to convey the idea of the verb “to be” along with a predicate adjective, a participle, but not as a passive. The difference between the two is usually not clear in English in contrast, for example, with Spanish, which most often uses the verb “ser” for the passive and “estar” for the predicate adjective construction. However, that should not be taken as an indication that the original Ch’olan sentence contains either a participle or the verb “to be.”

Cordemex Dictionary (Barrera Vásquez et al. 1980:910, 912), on the contrary, edits all of the data from the Colonial sources by adding a glottal stop when the meaning is related to “parado, puesto en pie” (*wa’laha’an*) and “enhiesta” (*wa’an*). One can also add to this the evidence from both Colonial and Modern Tzotzil for *va’al* as an adjective meaning “standing, straight, upright” and *va’an* as a verb meaning, among other things, “sit upright, stand up” (Laughlin 1988:324-325 and 1975:360).²⁹¹

Considering the seemingly conflicting linguistic evidence and the evidence from examples such as that in Figure 273 on the Palenque Tablet of the Sun and elsewhere, there is another possibility to consider. This logogram might well have the value **WA’AL** or **WA’L**. This would not be unusual considering other examples already mentioned such as *pakal* “shield” for which a logogram is indeed assigned. *Pakal* too is based upon a positional root in its attributive adjectival form. What is more, the root *wa’* is attested as the adjective *wa’al* in the Ch’olan, Yucatekan, and Tzotzil languages. There is then linguistic support for assigning **WA’AL** or **WA’L** as the value of the logogram in cases such as the one from the Palenque Tablet of the Sun shown in Figure 273.

Does this mean that one could consider deciphering the logogram as **WA’AL** or **WA’L** instead of **WA’** in all its occurrences? If so, the **la**, when present, could simply be viewed as providing a glyphic transition from the final **-L** of the logogram in order to write the *-laj* suffix. However, this would also require that the example from the Copán censer in Figure 271 be transliterated as ≠***wa-WA’L-wan** and transcribed as ≠**wa’lwan*. That is hardly likely to be correct. What is more, there are other occurrences of this logogram which provide even stronger evidence against deciphering the logogram T588 exclusively as **WA’L/WA’AL**.

²⁹¹There is, of course, the adverb *wal* meaning “now, immediately” or “then,” depending upon the language. It is attested in various forms in the Ch’olan languages and is likely to have been derived etymologically from *wa’* or *wa’al*. Its meaning is also related but is clearly not identical to that of the positional root. However, despite that relationship, it had long ago taken on a form and meaning of its own and is not directly relevant to this discussion.

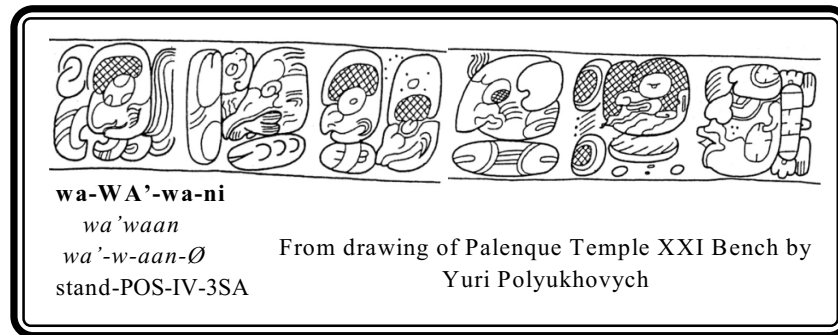


Figure 274. Intransitive positional *wa'wan*

Figure 274 from the Palenque Temple XXI bench contains an unmistakable **wa-WA'-wa-ni** *wa'waan* example. The 4context is similar to other passages in which the form suffixed with *-laj* occurs: *wa'waan ta ?-el okb'il ch'ok upakal k'ihnich* “he was standing/set-up on/at the ? foot place/platform, the youth *Upakal K'ihnich*. There is a third approach that can be taken regarding the value of the T588 logogram. This alternative suggests that scribes at different sites and times might have allowed two different values for the logogram. It starts with the likelihood that the most common approach of the scribes was to interpret the logogram as having the value **WA'**. That is why, in most of the cases, the *la* or *wa* of the suffixes is explicitly written. However, the spellings such as that on the Palenque Tablet of the Sun shown in Figure 273 indicate that some scribes viewed the logogram as having the value **WA'AL** or **WA'L**. Considering that the possible etymological source of the *-l-* in the *-laj* suffix may have been the *-l* of the attributive form of the adjective, in this case *wa'al*, such an alternative seems quite reasonable. This solution to the problem is the one that I have been and will be following here. After examining some of the examples of this positional verb with the past temporal enclitic attached, this issue will be briefly revisited because that combination offers an additional motive for not explicitly writing the *la* part of the suffix glyphically by using the **la** syllable in that context.

With the acceptance of the **WA'L** decipherment of the logogram for examples such as that from Palenque Tablet of the Sun, a clearer picture emerges. **WA'L-ji-ya** *wa'ljiiy* formally parallels the usual pattern of many passive stems when the enclitic is attached. The final consonant of the positional suffix, in this case also *-j*, remains as part of the stem while the vowel that would otherwise precede it, in this case *a-*, is dropped. In the case of both these types of forms, this is likely due to the stress moving to the last syllable of the compound, which is now the enclitic. The compound form of this positional verb plus the enclitic mimics the passive because the *l* of the *-laj* suffix has been accepted as part of the logographic form. The verb form itself is by no means a passive but remains a positional. It is the phonetic identity rather than any morphemic similarity that, in turn, results in the formal indistinguishability of the pattern.²⁹²

What the Tablet of the Sun example in Figure 273 does share with positionals in *-laj* is the use of the syllable **ji** in place of **ja** in order to provide a lead-in to the *-iiy* of the enclitic. What one encounters most of the time is a construction similar to the one shown earlier in Figure 260 with **CHUM-la-ji-ya**. However, on the Tablet of the Sun, the form is shortened even further through the elision of the vowel *a* from the positional *-laj* suffix. That results in **WA'L-ji-ya** *wa'ljiiy*. *B'uluch [k'in] cha' winikjiiy ju'n haab' wa'ljiiy k'awiil naal? naah*. "11 [days], 2 twenty-day months and one year ago it/he was positioned, *K'awiil naal?*, in the north."

In previous sections (6.5.6.1.2 f.), examples have already been shown in which vowels of glyphic syllables occurring word internally were not meant to be used in the pronunciation of those words. This strategy is followed whether the logogram is interpreted as either **WA'L** or **WA'**. An example of the former occurs on the Tablet of the Foliated Cross at Palenque is shown in Figure 275.

²⁹²This is another of many examples illustrating that it is phonetic similarity or identity that is at work in such cases rather than morphemic identity. Supposed morphosyllabic characteristics of the syllabic glyphs are not needed to understand how they function in this and similar contexts. Whether or not the *-aj* suffixes are ultimately etymologically related in this case is not critical. Many other *-aj* suffixes that are clearly not related are written in the same way as has already been demonstrated in Sections 2.2.10.9, 2.2.10.10 and elsewhere.

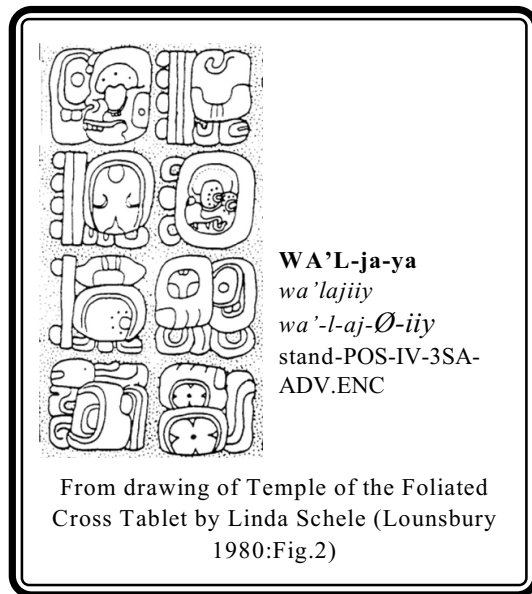


Figure 275. Rare form of *wa'l* with past temporal enclitic using **ja** instead of **ji** to write intransitive positional suffix

In the next example from Quirigua Stela K shown in Figure 276, the value of the logogram is instead likely to be **WA'**, based upon the previous discussion. This scribe spells the intransitive positional of the same verb as **WA'-la-ja-ya** *wa'l(a)jiiy*. The syllables **la** and **ja**, the latter of which is infixed into the **WA'** sign, are used to write the intransitive positional suffix *-laj*. The next part of the strategy is the same as in the Tablet of the Foliated Cross example. The syllable **ya** alone is used to write *-iiy*, in this context the past temporal enclitic. So this scribe also eschews the more

As is usual at Palenque, the value of the logogram is **WA'L** and it plus the **ja** syllable writes *wa'laj*. Next, as frequently attested, the **ya** syllable on its own is enough to write the enclitic *-iiy*. Then, if indeed including the **ja** syllable before the enclitic reveals the intent to explicitly include the vowel *a* phonetically, the resultant transcription is *wa'lajiiy*. This differs from the Tablet of the Sun example only in that there the *a* of the intransitive *-aj* suffix is not written which may indicate that it is elided. There is no difference functionally or semantically, only phonetically.

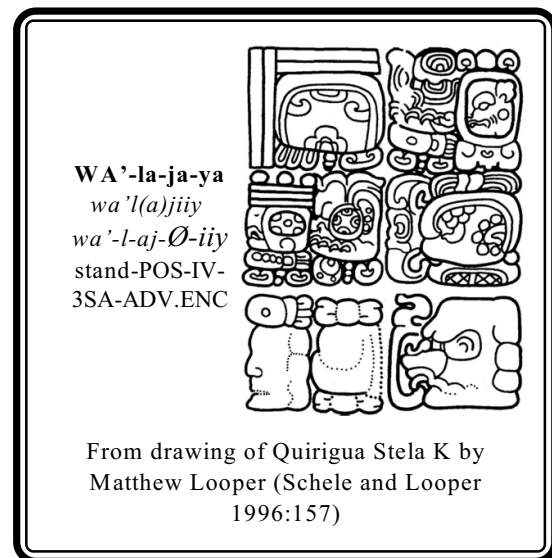


Figure 276. Rare form of *wa'* with infixed **ja** instead of **ji** to write intransitive positional suffix

common spelling that uses the syllables **la** and **ji** followed by **ya** when the desired result is *-l(a)jiiy*.

There is indeed something quite different about this Quirigua Stela K example **WA'-la-ja-ya** which is used to write *wa'l(a)jiiy*. There is already an **a** on **la** that is used to spell *-aj*. The **a** of **ja** is not needed to write that portion of the suffix and so is not used directly for its phonetic value by the reader or the writer. Instead, it is the **ya** alone that spells the needed phonetic *-iiy* which then in this context corresponds to the past enclitic. Not using a vowel phonetically, especially at a root boundary, but also sometimes at a morpheme boundary, is a practice that is not rare in other contexts as well, as has already been noted. As also noted, the practice is especially true of syllabic spellings, which by nature are often left with at least one extra vowel that is not meant to be pronounced. It is simply this convention that is being put into practice in this unusual spelling even though the morpheme in question is not the last one in the lexeme or compound word. It is not a necessary one in the case of *-laj* positional suffixes followed by the enclitic. The scribe could simply use a **ji** syllable in place of the **ja** syllable and, indeed, almost all scribes do. However, the system is flexible enough to allow either.

Finally, it is this next passage from Yaxchilan Lintel 30 shown in Figure 277 that may raise questions concerning the form of the enclitic. However, it is important to view this glyphic form in light of the previous examples. Except for the logogram used to write the root, the overall glyphic form is the same as that found on Piedras Negras Stela 8 on **ma-'AK-ja-ji-ya** shown in Figure 269. Although both the verb and the verb type are different, *mahkjiiy* (or *mahkajiiy*) it is derived as a passive and this present one from Yaxchilan

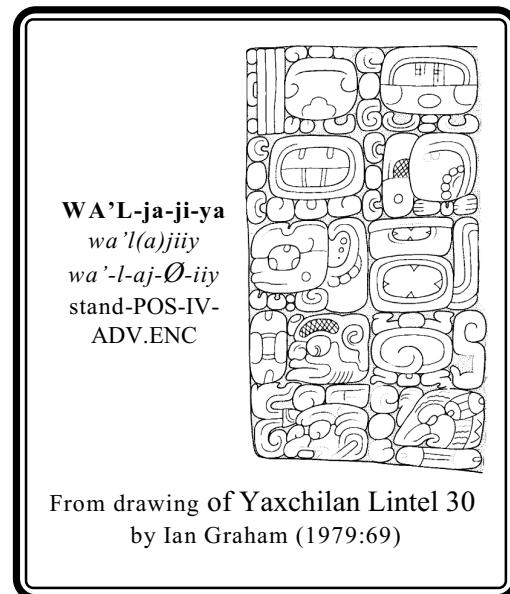


Figure 277. Intransitive positional with **ja** and **ji**, but only latter required

wa'l(a)jiiy as an intransitive positional, the pattern is the same: [STEM/ROOT]-**ja-ji-ya**. Although this Yaxchilan Lintel 30 example may appear to represent the passive form, it is instead a positional in *-laj*. In order to arrive at that interpretation, one must take into account the argument that the logogram in this case represents **WA'L** instead of **WA'** (**WAL** being excluded for linguistic reasons). As noted above it would have likely developed historically from the attributive adjectival form *wa'al*. What is more important for the present purposes is to determine which form of the enclitic is attached.

Here in the passage from Yaxchilan Lintel 30 (Figure 277), a different, more complex strategy is used than both on the **WA'L-ja-ya** of the Tablet of the Foliated Cross (Figure 275) and on the **WA'L-ji-ya** of the Temple of the Sun (Figure 273). In this passage from Yaxchilan both the **ja** and the **ji** syllables are written, resulting in **WA'L-ja-ji-ya** *wal(a)jiiy* followed by the direction *elk'in* “south” and the name of the *k'awiil*. “It was 17 [days], 1 twenty-day month, [and] 1 year earlier on 1 *Ben*, 1 *Ek' Siho'm* (“*Ch'e'n*”), it/s/he was set-up/standing in the south . . . *K'awiil*.”

Again one might be tempted to say that the long form of the enclitic appears here at least as *-jiiy* because both **ja** and **ji** are present. But it must be kept in mind that the occurrence of the same consonants next to each other does not necessarily result in writing the consonant twice nor in writing a different morpheme in the Classic script. Instead, the first of the two syllables spells the *-aj* intransitivizer portion of the *-laj* intransitive positional suffix and the second provides the lead-in to *-iiy*, the short form of the past temporal enclitic. Just as in the **ma-'AK-ja-ji-ya** *ma(h)k(a)jiiy* passive example in Figure 269, the **ja** writes the *-aj* in the *wal(a)jiiy* intransitive positional example and the **j** of **ji** simply allows it to be used adjacent to the *j* of the positional *-laj* suffix while also supplying the next vowel.

This spelling strategy seems to make the form of the word being written more easily read or at least makes its pronunciation more obvious. However, as already explained, it is one of several options open to the scribe to write a word with the same

basic form and meaning with perhaps some variation in pronunciation. It is not an example of how the long form of the enclitic is written.

Several examples of less common spellings involving the past temporal enclitic have just been examined. The intent has been to show that in these and similar cases, it is not necessary to conclude that the long form of the past adverbial enclitic *-ijiiy* ∞ *-iiy* is being written despite appearances that it may be. The analysis has revealed that writing techniques and strategies used in other contexts that do not involve the enclitic could also explain these and similar examples without concluding that the long form is present. What will be examined next in context are spellings of what appears to be the long form of the past enclitic for which no other adequate explanation is available.

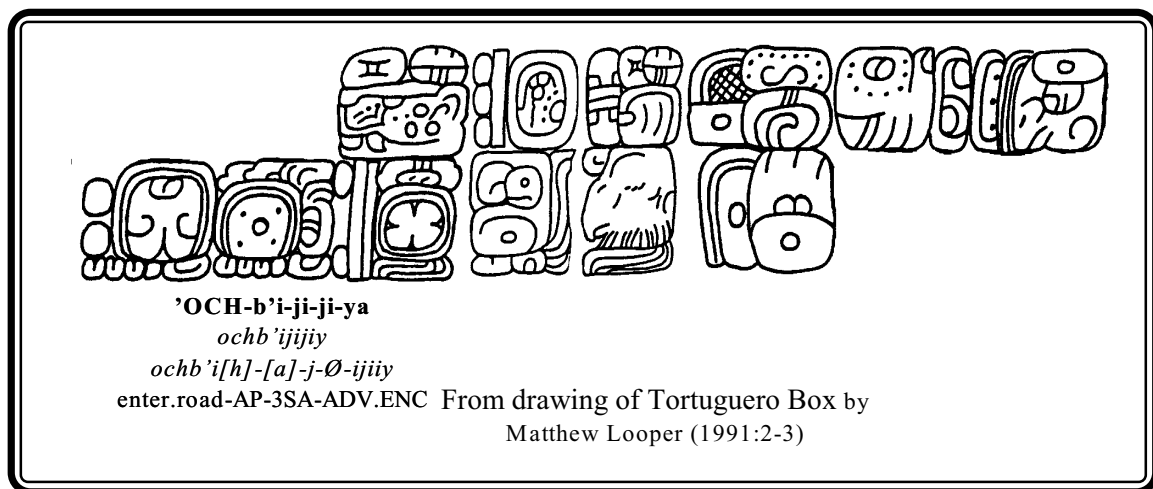


Figure 278. Past deictic enclitic *-ijiiy* written explicitly in longest form

6.5.9.2 Evidence for Long Form of Past Temporal Enclitic on Verbs

6.5.9.2.1 On 'OCH-b'i-ji-ji-ya

The short form of the adverb *-ijiiy* ∞ *-iiy* is by far the most common in the Classic inscriptions. Still, if we use the same criteria just used in several examples in the last section, there are several texts which do attest the long form attached to verbs. Figure

278 illustrates one of them.²⁹³ The most important part of the passage for the present purposes can be transliterated as **'OCH-b'i-ji-ji-ya** and transcribed as *ochb'ijijiy*. This particular lexeme in its entirety is perhaps best explained by providing examples of shorter lexemes using the same basic stem. Once these have been analyzed, the discussion will return to the longer one just illustrated in Figure 278.

The idiom *ochb'ihaj* “He road-entered” is likely a metaphorical way to refer to someone’s death or perhaps entombment, although there are other ways to express burial or entombment as well as death. This particular idiom is quite common in the Classic Period texts.²⁹⁴ The actual structure of the compound itself can be analyzed in this way. The verb root *och* is prefixed to the noun *b'ih* (perhaps shortened to *b'i* because of the weakness of the glottal /h/) to form the compound noun *ochb'ih*.

Joining a verb and a noun in this way to form a noun is attested in all the Ch’olan languages and in other Mayan languages as well. It is likely this nominal form which occurs on *K'ihnich Janaab' Pakal*’s sarcophagus as, for example, in Figure 279. In this passage, the compound noun *ochb'ih* is used in a verbless (copulaless) sentence with a null absolutive subject pronoun and the

nominal subject *K'ihnich Janaab' Pakal*. The immediately relevant portion can be transcribed: *chan uchumtun i ochb'ih K'ihnich Janaab' Pakal k'uh[ul] Mat Ajaw*. “4 [were] his tun seatings and then [it was] the road-enter[ing] (literally “enter-road”) *K'ihnich Janaab' Pakal*.” Within the context of the sarcophagus text, one could best

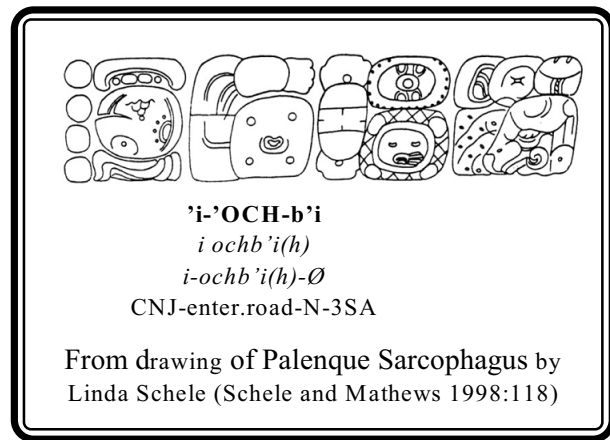


Figure 279. Compound noun *ochb'i(h)*

²⁹³The appearance of the temporal deictic clitic in its full form on the Tortuguero box was brought to my attention by Alfonso Lacadena (pers. com. 1997).

²⁹⁴It was first deciphered by David Stuart? (1989; 1990; cf. 1998:388) but was identified as a “death” verb some time before that by Lounsbury (1974:16-17): “the “Q” glyph is something terminal for an individual: death, or perhaps interment.”

translate this as a past tense in English. It is otherwise not inflected for tense or aspect but the context would suggest a past tense in English.

The next element to account for is the derivational suffix *-a* which here derives a transitive verb from the compound noun *ochb'ih* giving **ochb'iha*. I do not know of any actual attested occurrences of this form used as a transitive verb. Finally, the suffix *-j* derives an antipassive verb *ochb'i(h)aj* “he/she entered-road.” This derived antipassive verb is attested a number of times in the Classic texts. One example is shown in Figure 280. In this case, the nominal subject, *Kan B'ahlam* of Palenque, is not given in the same sentence but only later in the passage.

Of great importance for comparison are examples such as the one in Figure 281 in which the enclitic *-iiy* is attached to the antipassive compound verb *ochb'i(h)aj* resulting in *ochb'i(h)iiy*. Given the previous discussion of the temporal deictic enclitic, it is no surprise that this occurs in the context of a distance number. The death is indeed the event away from which the distance number is counting, “2 days, 11 months, and 9 years after she road-entered, and then it came to be

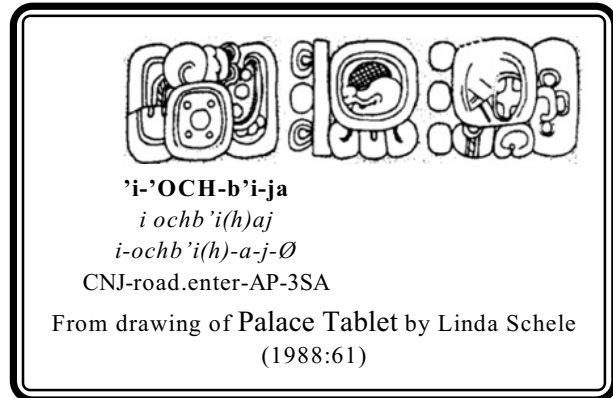


Figure 280. Antipassive form *ochb'i[h]aj*

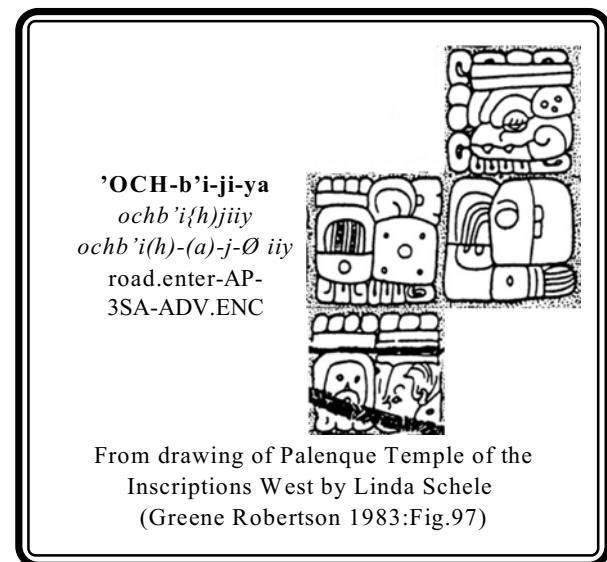


Figure 281. Antipassive form with past temporal enclitic attached: *ochb'i(h)jiy*

9 *Ajaw*, 18 *Suutz*.” The enclitic on the antipassive verb here represents a taxis-like strategy which signals that the “enter-road” is the earlier of the two events just as it often does on other verbs in distance-number contexts.

The examples just shown illustrate analytically the various stages in the construction of the verb form shown above in Figure 278. More than reconstructions, they are actual attestations representing most of the stages that could otherwise be reconstructed through an analysis to arrive at the form **'OCH-b'i-ji-ji-ya** *ochb'i[h]jijiiy*. Now it is time to examine this form in light of the information just provided. The nominal compound *ochb'ih* does not end in a *j* but rather an *h* if indeed the final consonant is written at all.²⁹⁵ There is no specific evidence that it does end in a *j* nor is there any reason to conclude that here the *-h* is simply written as *-j*. So the first **j** here is not needed to write the final consonant of the noun root *b'ih*. Rather, the evidence points toward its use in writing the final consonant of the *-aj* transitive plus antipassive derivational suffix combination. Here, just as is frequently attested in the case of other suffixes, the vowel of the final syllable of non-CVC stems is most often elided when the *-ijiiy* ∞ *-iiy* enclitic is attached as has been shown in previous examples of such stems. In this particular case, that denotes that the *a* of a reconstructed *-aj* elides and one is left with the *-j* of the antipassive suffix. This is precisely what we saw in the previous example from the Palenque Temple of the Inscriptions West Panel in Figure 281. But here, instead of the **ya** sign following next, there is instead a second **ji** glyph, which only then, in turn, is followed by the **ya** glyph. I argue that this is indeed the long form of the enclitic attached to the final consonant of the stem: **-ji-ji-ya** > *-jijiiy* > *-j-ij-iiy*. The first *-j* is the final consonant of the vowel-elided *-a-j* which derived a transitive and then an antipassive

²⁹⁵One has a choice here of analyzing T585 as a logogram **B'IH** although it is used in many contexts in which only the syllabogram **b'i** is required. It is also possible that the word for “road” was intentionally written as **b'i**. There is evidence from Ch'orti' for *b'i* instead of *b'ih* and from Tzeltalan for *b'e* instead of *b'eh*, not to mention from several other languages as well (cf. Kaufman 2002:67-69). That may, however, be simply a reflection of a different phenomenon, the elision of weak consonants especially at the end of words and even word internally, albeit perhaps not as frequently. Concerning the point being made here in the text, it is also important to be aware that at sites such as Palenque and Tortuguero, the distinction between *h* and *j* is almost always preserved (cf. Grube 2004a).

from a compound noun. The *-ij-iiy* is the compound or long form of the adverbial past temporal deictic enclitic. It is written in this passage just as it is written on numbers when the final consonant is *-n*: **-ni-ji-ya** *-n-ij-iiy*; and in a slightly shorter form as **-ji-ya** *-j-iiy* on time-period nouns.

The compound ends with the *-ijiiy* enclitic attached resulting in *cha' winikjiy och b'ijiiy b'ahlam ajaw*, “it was two months after he road-entered, *B'ahlam Ajaw* (Jaguar Lord)”²⁹⁶ Since the second glyphic **ji** would serve no purpose as phonetic complementation to a syllabically written word, its function as writing an additional syllable is quite unavoidable.²⁹⁷ Further, because the stem is antipassive, it would be ungrammatical to suffix this intransitive verb with a transitive resultative suffix, as has been suggested, its employment of a syllabic **ji** sign notwithstanding.²⁹⁸ In this example and others like it, the presence of the *-ijiiy* allomorph of the past temporal enclitic is the most logical, straightforward, etymologically defensible, and empirically attested interpretation. It would seem that opposing views would have to carry the burden of proving otherwise. Assuming it to be an example of an otherwise unattested **transitive resultative suffix on an intransitive stem** does **not** constitute **evidence**. Here the Ch'olan-speaking scribe, realizing that *-ijiiy* and *-iiy* were two forms of the same basic adverbial enclitic compound, chose to write the long form. Indeed, as we shall soon see, there have, over the past few years, been enough of the long forms of the enclitic attested on verbs, adjectives, and nouns that they can hardly be considered mistakes or “anomalies” in the Classic-Period texts.

²⁹⁶The passage continues with the next sentence, “[then] on 8 *Kawak* 12 *Yaxk'in* he was seated in the kingship, Macaw Black Cloud.”

²⁹⁷Even if one interpreted T585 as a logogram, it would be **B'IH** with a final glottal **H**. The **ji** in question would have to be the phonetic complement to **B'IH-ji** writing *b'ihaj-* with the *-a-* elided and the final laryngeal *-j* remaining. Since a phonetic complement to a syllabic glyph would not make sense, the second **ji** could not be interpreted as such in this view either. So the argument being presented here would still stand.

²⁹⁸This has been proposed by MacLeod (2004). More detailed arguments against this claim will be presented later in Section 6.5.9.3.2.

6.5.9.2.2 On 'u-KAB'-ji-ji-ya

Another verb that occurs at least twice at Palenque with the long form of the enclitic *-ijiiy* ∞ *-iiy* attached is the derived transitive *kab'i* “to guard, oversee.” One of those formed in stucco is shown in Figure 282.

Transliterated, this glyph block is **'u-KAB'-ji-ji-ya** with the **KAB'** markings infixed into the first **ji** sign. Transcribed, it is *ukab'jijiiy*. Unfortunately, this glyph block formed from plaster was found loose with others in Temple XVI. Because they have not yet been securely reconstructed as a text, I will turn attention immediately to the next example.

Another example of **'u-KAB'-ji-ji-ya** *ukab'jijiiy* occurs in context on the Palenque Temple XXI bench as shown in Figure 283. It is preceded by a report concerning the dedication of a building involving the gods GI and GII. This is then followed by *ukab'jijiiy* *ch'a...?* [“Casper”] *k'uhul b'aakal ajaw*, “He oversaw it (was in the state of having overseen) it, “Casper,” holy bone (“Palenque”) lord.

The presence of the transitive resultative suffix is indicated by the first **ji**

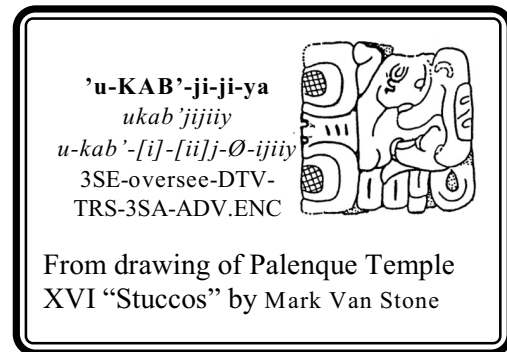


Figure 282. Derived transitive verb inflected for resultative aspect with long form of past temporal enclitic attached: *ukab'jijiiy*

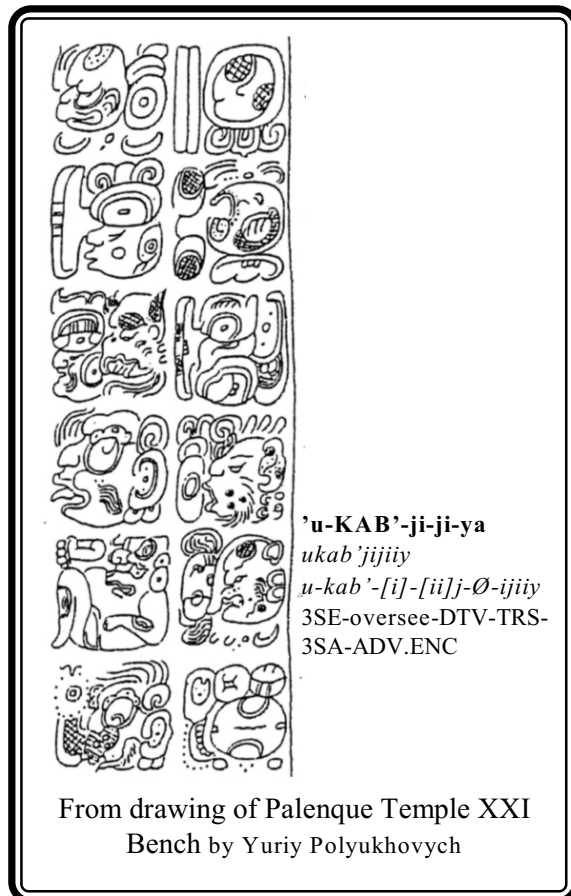


Figure 283. Derived transitive resultative with long form of past enclitic attached in context: *ukab'jijiiy*

sign, which transcribed is normally *-ijj* assuming no further affixing. We have already seen earlier in the discussion how attaching the *-iij* enclitic often shortens the resultative suffix to *-j*. The second **ji** sign along with the **i**-vowel of the first **ji** sign writes the first part of the enclitic *-ijjiy*, that is, *-ij-*. The vowel is also short when it serves as the first part of the longer form of the past temporal enclitic. This second **ji** sign is in no way needed to write the resultative suffix as the many examples of **'u-KAB'-ji** and **'u-KAB'-ji-ya** can attest. Finally, the **ya** sign along with the **i**-vowel of the second **ji** sign writes the second part of the compound enclitic *-ijjiy*, that is *-iij*.

In order to illustrate that the occurrence of the long form of the adverbial deictic enclitic *-ijjiy* on *kab'i* is not limited to Palenque, Figure 284 shows an example of **'u-KAB'-ji-ji-ya** on Tikal Altar 5. Although not shown here, this passage is included as a caption in the scene that is pictured on it. It states of the event both as depicted and as reported: *ukab'jijiiy chan sak wayis* “He oversaw it (was in the state of having overseen it) *Chan Sak Wayis*.

There is, then, no evidence at all that the presence of the second **ji** sign can be attributed to writing the transitive resultative suffix since it would be completely superfluous. There are, however, many examples of this temporal enclitic being written glyphically as **-ji-ya** on other words in the Classic Ch'olan script. What is more, any acceptable transcription of **ji-ji** would fail to produce the expected and attested transitive resultative suffix *-ij* or *-iij*. Based upon evidence from Tzeltal and Tzotzil, a verb compound including the transitive resultative suffix cannot be otherwise further derived nor inflected for tense or aspect.²⁹⁹ Therefore, this specific construction, along with the other example mentioned above, provides an argument

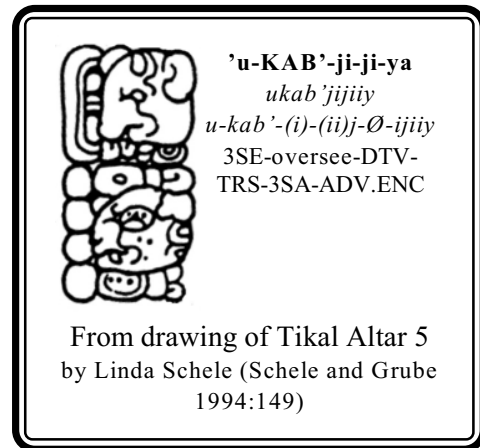


Figure 284. Example of *ukab'jijiiy* from Tikal

²⁹⁹Note that this statement does not refer to suffixes of the same or similar shape in these languages that have already been discussed above in detail and do not represent the transitive resultative inflection.

against interpretations of these specific **-ji-ya** occurrences as something other than an enclitic which can be attached to words such as inflected verbs. Just as in Tzeltal and Tzotzil, the evidence indicates that in Classic Ch'olan the transitive resultative behaves the same at least in this respect. It does not allow any further inflection for aspect or tense.

6.5.9.2.3 On WA'L-ji-ji-ya

Evidence for the presence of the long form of the temporal deictic enclitic on verbal stems also comes from the appearance of **-ji-ji-ya** on another root class of verbs. Figure 285 contains a passage from the Palenque Temple XIX Platform. This passage is contained in the 819-day-count portion of a Long Count. What is more, the relevant verb here appears in almost all 819-day count passages although not in exactly the same glyphic format. It occurs in other contexts as well, especially those having to do with the erection of stelae or other upright monuments.

Because the logogram used to write the root or basic stem of this verb has been

discussed in great detail in Section 6.5.6.1.3,

its value here in this passage will simply be affirmed on that basis as **WA'L**. The next sign in order is **ji**. Just as in the spelling **WA'L-ji-ya** on the Tablet of the Sun example in Figure 273, the **ji** syllable serves two purposes. The first is to provide the *-j* of the *-l(a)j* intransitive positional suffix. The second is to provide an *-i* to lead into the *-i* of the past temporal deictic enclitic. That leaves us so far with a transcription of *wa 'lji-* in both

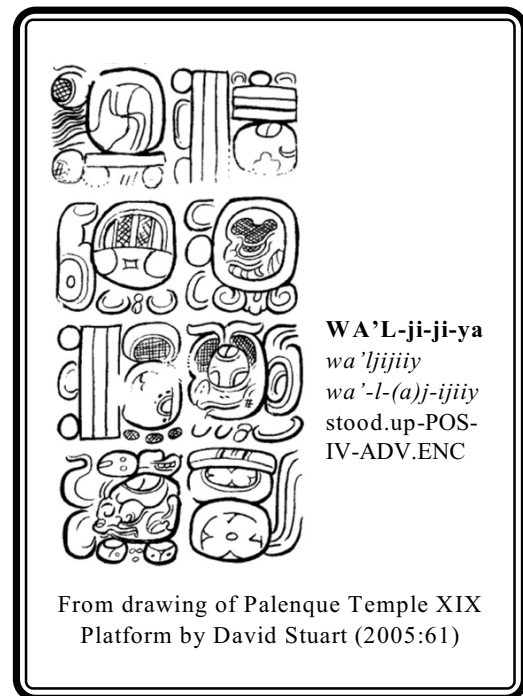


Figure 285. Long form of past adverbial enclitic on an intransitive positional verb: *wa 'ljijiiy*

cases. Also in both, the otherwise expected *a* of the intransitive positional suffix is elided.

Next, in the Temple of the Sun example, the scribe wrote the syllabic sign **ya**. This provides us with *-iiy* (or *-iy* if one does not accept vowel length for Classic Ch'olan). It is at this point that the two occurrences part ways. The Temple XIX panel example has another **ji** syllable instead of following immediately with a **ya**. This produces instead *-ijj* or, more likely *-ij* because it is followed by an additional syllable. So while the transcription of the Tablet of the Sun examples stands complete at *wa'ljiiy*, the Temple XIX example stands incomplete with *wa'ljiji-*. The second **ji** syllable then provides another *-i*. Since it is followed finally by a **ya** syllable, it is clear that this second *-i* leads into *-iiy* as well. The result of the transcription is *wa'ljijiiy*. Breaking the compound down into its parts, the most likely result is *wa'-l(a)j-ij-iiy*. This includes the root or stem *wa'* “stood up/standing” with the *l* actually serving analytically as the first consonant in the *-l(a)j* intransitive positional suffix and the *-a* not actually present because it elides in this phonetic context. Next comes the *-ij* which serves as the first part of the compounded long version of the past temporal enclitic. The *-ij* has a short vowel despite its Proto-Mayan *-ijj* heritage, both because it is followed by another syllable but also because even when the first part is written alone as the non-past enclitic in Classic Ch'olan, it follows the pattern **Ci-ji**. This rules out a long *-i-* even according to Lacadena and Wichmann's (2004) spelling rules. Finally, the *-iiy* completes the allomorph that I have been calling the long form of the enclitic, that is, *-ijjiiy*. In all of those contexts that represent this verb in back-referenced, distance-number contexts, there is no morpheme that would fit other than the long form of the adverbial, past-temporal-deictic enclitic.

What is important for our present purposes, is to argue on the basis of the attested forms that the example shown in Figure 285 from Palenque Temple XIX transliterated as **WA'L-ji-ji-ya** and transcribed *wa'ljijiiy*, attests the use of the full form of the enclitic *-ijjiiy* on a positional verb in the Classic Period texts. The consonant of the second glyphic **ji** sign is accounted for if it, along with the **i** of the preceding **ji** syllable, is indeed writing the first part of the long form of the enclitic. The vowel of the second **ji** syllable is also

accounted for if it is indeed writing the *i-* that leads into the last part of the enclitic, that is, *-iiy*. On the basis of all this evidence, considering the two **ji** syllables and the **ya** sign along with the support offered by similar examples of other verbs shown in this section, I argue that what this scribe writes here is the long allomorph of the past enclitic. No other conclusion seems able to muster as much evidence or to provide an analysis as straightforward as this one.

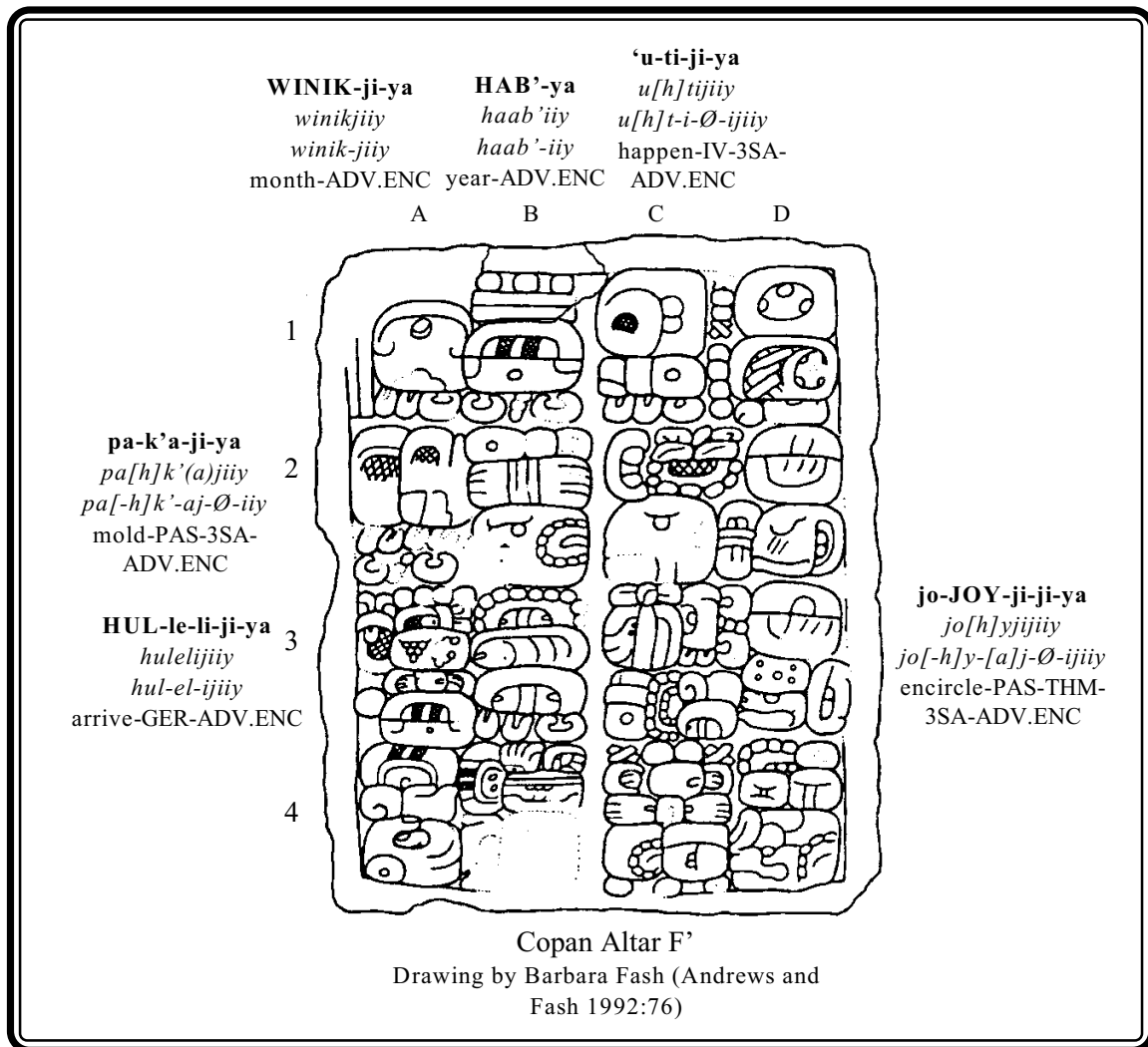


Figure 286. Multiple examples of temporal deictic enclitic *-ijiiy* ∞ *-iiy*

6.5.9.2.4 On Two Verbs and a Gerund in Same Inscription

Up to now the discussion of the occurrence of the long form of the enclitic *-ijiiy* ∞ *-iiy* on verbs has taken a conservative approach by accepting its presence only if there is no other equally plausible way to explain the shape or glyphic spelling of a particular verbal compound. Besides the examples already examined, such as **WA'L-ja-ji-ya** *wa'l(a)jiiy* and **ma-'AK-ja-ji-ya** *ma[h]k(a)jiiy*, there are similar forms of other verbal compounds that might otherwise also allow for alternative interpretations which will not be addressed in detail here. These include forms such as **CHUM-la-ja-ji-ya** *chuml(a)jiiy* “after he was seated” (cf. Toniná Fragment 34b, Monument 111) and **SIY-ja-ji-ya** *siy(a)jiiy* (or *sihyajiiy*)³⁰⁰ “after he was born” (cf. also Palenque Sarcophagus at glyph position 3 and Rio Azul Tomb at position A9). Forms such as these can be evaluated in a way that allows for not using the **a** vowel of the **ja** syllable at stem boundaries. Then the **j** of the **ji** syllable can be interpreted as simply allowing for the insertion of an *i* vowel to lead into *-iiy*. Because of those possibilities, forms such as these have not been employed in arguing for the presence of the long form of the past temporal enclitic on verbs.

Despite that methodological limitation, several occurrences of verbs that do manifest the long form have already been identified. The inscription from Copán Altar F' in Figure 286 adds two more verbal lexemes to that number, one of which is especially noteworthy because it is a root intransitive verb. A third occurrence of the long allomorph is also extremely important for a different reason. It occurs on a gerund, a nominalized verb, which helps significantly to demonstrate that the past enclitic does not represent verbal inflection. Gerunds are derived nouns and do not take verbal suffixes.

Copán Altar F' contains several words which have the adverbial temporal deictic enclitic *-ijiiy* ∞ *-iiy* attached.³⁰¹ Among them, as already mentioned, three include the

³⁰⁰This would be *si[h]yajiiy* instead of *siyajiiy* if considered passive instead of inchoative. Either interpretation is possible but also problematic for reasons that will not be further discussed here.

³⁰¹The letters (A - D) and numbers (1 - 4) used in the drawing correspond with those used by Schele in *Copán Note* #111 (Schele 1993:1). However, using A - D for the columns instead of A - B should
(continued...)

enclitic written explicitly in its long form on compounds other than numbers or time-period nouns. Following the second distance number at A3, the scribe wrote **HUL-le-li-ji-ya jo-JOY-ji-ji-ya ti K'UH-NAL-li hulelijiiy jo[h]yjjiiy ti k'uh[ul] naal, i . . .**” ... after arriving/having arrived, he (or “it,” the *Chaak* statue) was walked/taken around in the holy place and then . . .” Transliterated, the relevant form here is **HUL-le-li-ji-ya**.³⁰² The stem *hulel* here is best analyzed as a gerund, “arriving, having arrived” derived from the intransitive verb *hul* “to arrive” plus the nominalizer *-el*.³⁰³ The **le** is used to provide the *e* of the *-el* suffix. As usual, since the **l** matches the final consonant of the logogram **HUL**, it does not add anything phonetic to the word. The consonant in the next syllable, **li**, writes the *-l* of the gerund. Because there is no call for verbal inflection on a gerund, the **i** of **li** is best explained and transcribed as the first *i* in *-ijiiy*. The next syllable **ji** writes the following *-j* of the first part of the enclitic and the **i** along with the **ya** sign writes the final *-iiy* of the long form of the adverbial past temporal enclitic.³⁰⁴

Besides the glyphic shape and the linguistic form of the word **HUL-le-li-ji-ya hulelijiiy** (or perhaps *huleljiiy*), one should also keep in mind its function within the context of the whole passage. This gerund-plus-enclitic compound occurs within a passage that is all part of a back-referenced event tied in by a distance number to another

³⁰¹(...continued)

not be construed as an invitation to read this text as if it were written in two double columns. Instead, Row 1 is to be read straight across from A to D before continuing on to Row 2.

³⁰²Nikolai Grube (2004a:76) has proposed that the sign used to write **HUL** is a logogram and is to be distinguished from the similar but not identical syllabic glyph which has the value **ju**.

³⁰³The use of “having” in the translation is not meant to indicate that a perfect form is involved. Instead, the phrase “having arrived” is meant to translate a gerund in the context of a back reference and the presence of the past temporal enclitic.

³⁰⁴Barbara MacLeod (pers. com. 1997) first suggested this type of argument to me in connection with another participial form on a different inscription. In regard to this particular passage, MacLeod in 1989 saw the similarity between the “suffix” on this verb and “that found on Proto-Cholan **chäb*’-*ij-i*” meaning “two days ago.” At the time, she wrote that this meant that the “verb is bound to the DN in a ‘days (or k’atuns, tuns) ago’ sense” (MacLeod 1989:4). As noted in detail in Section 4.7.2, I agree with MacLeod that the **ji** on **’u-kab/chab-ji ukab’ij** writes the resultative (MacLeod’s “perfect”) form of this verb. However, it should also be noted that resultative (“perfect”) inflection is not attested as suffixed to gerunds formed from intransitive verbs in *-el* in any Colonial or Modern Tzeltalan or Ch’olan language. Resultative inflection has already been discussed. As verbal inflection, it cannot be suffixed to nominal stems. MacLeod’s suggestion that this gerund or the intransitive verb *uhti* could be inflected by the **transitive** resultative (her “perfect”) suffix in this inscription will be addressed below in Section 6.5.9.3.2. Of course, I disagree with that proposal.

event. Within the context of a distance number, the enclitic serves to provide adverbially what is in many other languages marked verbally by taxis, that is, the temporal relationship between two events. That is why the past temporal enclitic can appear on a gerund. Although it modifies adverbially the clause as a whole, its character as an enclitic allows it to be attached to a noun.

Immediately following this gerund, is another compound that includes the full allomorph of the enclitic *-ijiiy*. **JOY-jj-ji-ya** *jo[h]yjiijiy* at C3 on Altar F' is a combination of the passive form of the verb, *jo[h]yaj*, and the enclitic *-ijiiy*.³⁰⁵ The usual form taken by passive verbal compounds with the enclitic *-ijiiy* ∞ *-iiy* has already been examined, but an example can be seen in this text as well. At A2 is the passive compound **pa-k'a-jj-ya** > *pa[h]k'ajiiy* (or *pa[h]k'(a)jiijiy*) including the past deictic enclitic with its usual spelling on such verbs.³⁰⁶ These two compounds do not express different basic forms but simply two allomorphs of the enclitic, the first with *-ijiiy* and the second with *-iiy* which is the usual allomorph that occurs on passive verb stems.

A second verbal compound with the long form of the past enclitic *-ijiiy* ∞ *-iiy* occurs at C1 in this text. It represents a very important exception to the normal pattern for writing the past enclitic on root intransitive or quasi root-intransitive verbs such as *uht*. This verb *uht*, *uhti* with the root-intransitive marker, almost always takes the short form *-iiy*, and is usually written graphically as **'u-ti-ya** *u[h]tiijiy*. Here, in a variation very demonstrative for our purposes, the compound is written syllabically **'u-ti-jj-ya** and can be transcribed as *u[h]tjiiijiy*. The lexical stem to which the enclitic attaches is here *uhti* because the stem includes the root-intransitive marker *-i* as still attested in modern Ch'ol on root intransitives in the completive aspect. Because the attachment of the enclitic to this stem results in *uhtijiiijiy*, the first *i* represents a merger of the root-intransitive marker *-i*

³⁰⁵The reading of **JOY** instead of **JOK'** for this logogram was suggested by David Stuart (pers. com 1997) based especially upon the evidence from Yaxchilan Lintel 26.

³⁰⁶If one considered logographically rather than syllabically written forms paradigmatic, one would elide the /a/ of the *-aj* thematic suffix and transcribe it as *pa[h]k'jiijiy*. This option is indicated by the transcription in parentheses. If one instead took syllabic examples to be paradigmatic, one would have to add an *a* in most instances where a logogram was used to write the verb root.

and the initial *i-* of the enclitic. Similar to its occurrence on *winik* as *-jiiy*, this form is being considered here an alloform of *-ijiiy* due probably to phonetic influences. On *winikjiiy*, it is likely due to the length of the stem *winik*, which is two syllables long, and the stress that is usually put on the final syllable in Ch'olan words. Here it is mainly due to the propensity of the Ch'olan languages not to preserve two adjacent vowel sounds, especially when the vowels are identical. As such, *-ijiiy* and *-jiiy* are simply phonetic alloforms but probably not allomorphs of the enclitic as are *-ijiiy* and *-iiy*.

More evidence that *uhtijiiy* represents *uhti* in a compound with the full form of the enclitic comes from the presence of the *j* in the enclitic. On derived intransitives such as passives with an *-aj* thematic, on intransitive positionals in *-laj* and on transitive resultatives in *-VVj*, the presence of the *-j* can be explained by attributing it to the final consonant of the suffix. On *uhti*, the *-j* is otherwise unmotivated. Supporting evidence comes from the current context. Although the verbal compound here is *uhtijiiy* rather than the usual *uhtiiy*, the meanings and functions of both the verb and the enclitic remain the same as in the many examples in which the shorter form is used within the context of distance numbers and back references. This verb and its unmarked pronoun are used to make a general statement referring to the event to which the dependent absolutive pronoun points. The past temporal enclitic indicates the temporal direction of the earlier event. This example provides additional evidence that the *-iiy* attachments to *uhti* elsewhere indeed represent the past deictic enclitic since they are contextually identical in all relevant details to this one which employs the long form of this same enclitic.

6.5.9.3 Response to Denial of Existence of Long Allomorph of Past Temporal Enclitic on Verbs

When the occurrences of the long allomorph of enclitic in this Copán text are considered along with the others that have been presented from inscriptions at several sites on various classes of words, we are confronted with the long form of the past deictic enclitic attached to a variety of compounds. *Ho 'laju 'nijiiy* provides us with one of several

examples of the long form of the enclitic on numerical adjectives. *Winikjiiy* and *haab'jiiy* provide us with examples of a phonetically-slightly-shortened long form *-jiiy* on time-period nouns. *Hulelijiiy* attests its presence on a gerund, a nominalized verb but nevertheless a noun. *Ochb'ijijiiy* supplies evidence for the long form on an antipassive ultimately derived from a compound noun. *Wa'ljijiiy* demonstrates its appearance on an intransitive positional verb. *Johyjijiiy* illustrates the use of the long form of this enclitic on a verb inflected for the passive mood. *Uhtijiiy* manifests its employment on a verb that behaves as a root intransitive in the Ch'olan languages. Finally, multiple examples of *ukab'jijiiy* manifest its presence on a derived transitive verb inflected for the transitive resultative aspect.

6.5.9.3.1 Response to Critics' Statements That Examples are “Bizarre” and “Anomalous”

These examples cannot be easily dismissed simply by calling them “bizarre.” They are not even so-called “mistakes” of the type exemplified, for example, on Yaxchilan Stela 12 where *chumwaan* is written in the order **chum-ni-wa**. Changing the order of glyphs in a collocation is fully within the range of normal writing variation and such examples can be easily found throughout the inscriptions. What is more, these examples of the long form of the enclitic are hardly “mistakes” or even mere scribal license. They are intentionally written by scribes who are fully aware of what they are writing. They are not “bizarre” but fit very well into an overall interpretation of the use of the past deictic enclitic in the inscriptions.

Because five of the examples just reiterated are verbal compounds, it would be hard to justify the *-ij* portion of this compound enclitic as having the meaning “day” or even “TIME-UNIT” in these contexts.. Another verb that occurs at least twice at Palenque with the long form of the enclitic *-ijiiy* ∞ *-iiy* attached is the derived transitive *kab'i* “to guard, oversee.” One of those formed in stucco is shown in Figure 282. It is also not justifiable to dismiss all these examples as being rare as declared by Robertson et

al. in their arguments against an earlier unpublished paper containing some preliminary results of my dissertation research. “These are so rare as to suggest hypertrophied spellings” (Robertson et al. 2004:282). It should be noted that there are as least as many of these examples as there are, for example, of antipassive forms written using glyphic **wa**. Yet those are surely not worthy of outright dismissal because of that. In regard to the *ochb’ijjiy* form, they have the following comments:

In any case, the extra **ji** on *och-b’ih* above may have less to do with an extended deictic spelling than with the aspirate that often attaches to the final element: the term for ‘road’, *b’i(h)* (cf. Piedras Negras Stela 1: C19, **OCH-b’i-hi**, or Piedras Negras Altar 1: U2, **OCH-b’i-hi-AJ**). The other *j* undoubtedly refers to the syncopated form *j*, which derives from *-aj* (Stuart et al. 1999[a]:28). (Robertson et al. 2004:282)³⁰⁷

But even their transliteration of these examples shows that this first aspirate on *b’ih* is an *-h* and not a *-j* (cf. Grube 2004a). Evidence especially from Tortuguero, like that from Piedras Negras and Palenque but unlike Yaxchilan, indicates that the distinction between the glottal aspirate /h/ and the velar aspirate /j/ is generally well-preserved in their inscriptions. For example, Tortuguero Monument 6 includes **’u-b’a-hi** *ub’aah* in a parentage statement and a fragment from Tortuguero in the Emiliano Zapata Museum includes **’u-b’a-hi-li** for *ub’aahil*. This spelling of *b’ih* “road” with an **h** instead of a **j** can even be seen in texts as late as the Dresden Codex as shown in Figure 287: **ta b’i-hi** *ta b’ih*.

³⁰⁷Of course, I would transliterate the Altar 1 example as **OCH-b’i-hi-ja**. The **i** following the **h** at the word boundary would then be dropped in the transcription *ochb’ihaj*. As for the example from “Piedras Negras Stela 1:C19,” there is no C19 on that monument nor can I find an example of *ochb’ih* on it at all. Such a form does exist in other inscriptions and my comments have to do with the basic form – not with the particular example to which they may be referring.

The *h* on *b'ih* is more likely to be dropped altogether than to be spelled with a *j* when it occurs outside of this “entered-road” context. This is due in part to the weakness of the /h/ glottal aspirant even compared to /j/ although other consonants are also sometimes elided in similar positions as well. But in the road-entered context, the *j* is often present because it reflects not the final aspirant of *b'ih* but because the *-a-j* suffix in full or abbreviated form is necessary for deriving the verb plus noun nominal compound, first as a transitive verb and then ultimately for the antipassive mood. The vowel of this derivational suffix often elides when the enclitic is attached just as does the vowel on various other suffixes of the same or slightly different shape as we have seen in many of the examples already shown. It is that *j*, then, that is written by the first *j* in the **OCH-b'i-ji-ji-ya**. It is not written as **ja** both because of the elision and also because the *i* of **ji** is being used to write the first part the following morpheme.

The **hi** of **b'i-hi** is not written for one or both of two reasons. As a very soft consonant, it is often not written – and presumably not pronounced either. Even if it were, it would be merged or rather elided phonetically when adjacent to the /j/ of the derivational suffix whose vowel is also elided under the force of the temporal enclitic's attachment which draws the stress to its final syllable. By failing to illuminate the exact makeup of this and the other referenced examples and speaking in generalities about the aspirant that sometimes occurs on *bi(h)*, they are able to ignore the fact that the first aspirant written in the Tortuguero Box passage (velar *j*) is not same as that in the other two examples (glottal *h*). Using this approach they fail to point out that there are two **ji**'s writing velar *j*'s for which they have to account. That first **ji** is not writing the final

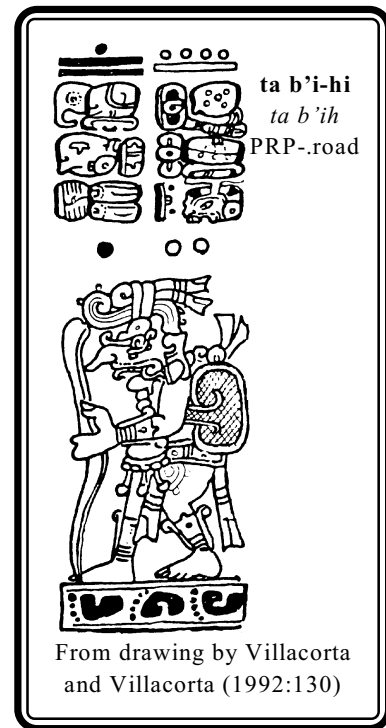


Figure 287. Spelling of “road” as **bi-hi** with *h* in Dresden Codex 65b.

aspirate of *b'ih*. It is writing instead the remaining phonetic value of the *-a-j* derivational suffix as it behaves phonetically under the effect of the attached enclitic. This first **i** in **(j)i-ji-ya** is used to write the first vowel of the enclitic *-ijiiy* and the second **i** is used in writing the final syllable of that enclitic.

The same authors (Robertson et al. 2004:282) argue against the Copan Altar F' evidence I offered for the long form of the enclitic on *uhtijiiy* by stating simply that it is “a bizarre and inexplicable version of the root *ut* [sic] ‘happen’.” They evaluate the *ochb'ijiiy* evidence from the Tortuguero Box in this way: “It is well to remember the strikingly anomalous nature of this text. For this reason it seems imprudent to base a broad grammatical theory on this inscription.”

Of course, the evidence from the Tortuguero Box is valuable just as is the evidence from Copan Altar F' and all the other texts mentioned above in which similar forms occur. What is more, when one adds to these all the other clear examples of the long form of the enclitic on verbs, not to mention on nouns and adjectives, dismissing the evidence with terms such as “bizarre” and “anomalous” is beside the point. It appears bizarre and anomalous only within a specific theory that interprets as past tense inflection the *-iiy* form of the enclitic that is written with glyphic **-(C)i-ya** or **-ya** and which occurs most often on verbs. The spelling **'u-ti-ji-ya** is “bizarre” only because their theory rules it out. The spelling **'OCH-b'i-ji-ji-ya** is “anomalous” because it does not follow the rules set down by their theory. They do now agree with my original 1997 proposal that the Classic Ch'olan *-iiy* “suffix” (really an enclitic), derived etymologically from Proto-Mayan **-eer*. They also seem to consider it completely grammaticalized in that specific shape and so incapable of existing on verbs in Classic Ch'olan in the form *-ij-i-y* despite the reconstruction of the ancestral form **-ej-eer* for Proto-Mayan as well. Their interpretation of Common Mayan **-eej* as “day,” against which I have already argued above in Section 5.2.3.4, also adds to their reticence in accepting the possibility of the long form's appearance on verbs.

My analysis, on the other hand, allows for the presence of the long form of the past temporal enclitic on verbs as well as on other morpheme classes, but surely does not require it. It neither started from such examples nor does it depend upon them. What is more, it is by no means true that I base “a broad grammatical theory on this inscription.” Instead, I first conceived the hypothesis based upon the similar discourse patterns and the formal similarity of the relevant morphemes in the *Paxbolon-Maldonado Papers* and the Classic Ch’olan inscriptions as well as upon the contexts in which the enclitic, in any form, appeared on verbs. When I first presented a preliminary version of some of these ideas to several scholars, which included the three quoted here, these inscriptions were not even included. Instead, I was spurred on to look further by one of these scholars who stated that he would believe my theory if I could just present him with one example of **’u-ti-ji-ya**. I did precisely that later, but, unfortunately, still could not change his mind. It was reassuring to know, however, that this precise compound and examples of several other verbs not yet recognized, along with one in an inscription not yet unearthed at the time, do indeed include the longer allomorph of the enclitic on verbs. According to the interpretation I presented at the time and have repeated here, these forms were predictable, or at least possible, based upon this hypothesis. That they were later identified in the Classic Ch’olan texts themselves only helps to strengthen the evidence in its favor. Since then, I have become convinced of its basic correctness for many reasons including the results of an investigation into the progression of the Maya verbal system from proposed Proto-Mayan origins up through the current Ch’olan languages. The results of this further study will be presented in Section 7.

Returning to the examples of verbs with explicit *-jiiy* and *-ijiiy* enclitics, it does not seem likely that they were mistakes or mere scribal license. I prefer to approach especially the monumental texts with the premise that the texts were written by scribes who were fully aware of what they were writing. Only in the face of overwhelming evidence would I conclude that they made errors in particular instances. In this particular case, one would have to assume multiple errors in one inscription and similar errors in

several different inscriptions created at different times and at polities in different areas. But if one takes my hypothesis into account, one that I formulated without the benefit of these inscriptions, they are not errors at all. In fact, they appear instead to be compounds written by scribes who, one might say, were also good “grammarians” and “etymologists” who realized that *-ijiiy* and *-iiy* are two different forms of the same adverbial enclitic that could be attached to many different types of words.

Whether or not this usage entails a reinterpretation of a compound form *-ij-iyy* is not the most important issue here. Most important is the presence of undeniable examples of this usage on verbs in Classic Ch’olan by native speakers, whatever the underlying analytical justification. Simply not liking what the scribes wrote based upon a competing hypothesis does not justify declaring its illegitimacy unless one can provide overwhelming evidence that they are mistakes. Instead, I believe that the evidence points in other directions. For example, it is possible that at least the scribes who wrote these forms were knowledgeable and literate enough to recognize that alternate forms of this adverbial enclitic could appear on verbs as well as on numbers and time-period nouns or perhaps they simply wrote forms that they heard from others and maybe used themselves as infrequent but alternative forms of the same morphemes. Whatever the reason, it is not necessary here to justify their presence beyond what has been or will be presented in this study since the data are *prima facie* evidence for it. It is up to those who disagree to provide a better explanation for the data. In any case, those data do not compose the primary evidence supporting the presence of the enclitic for “ago, earlier, back then” on verbs in Classic Ch’olan. Nevertheless, they do indeed help to provide arguments against competing interpretations that insist, for example, that the *-ij* of the *-ijiiy* enclitic must mean “day” or “TIME.UNIT.”

Another objection that is offered by Robertson et al. (2004:282) is this: “The use of *-ij-iyy* on numbers, which Wald apparently sees as involving the same elements, is consistent, never showing the variability that he suggests is the norm.” This objection can be countered with two points. First, I do not now, nor have I ever suggested that this

variability is the norm. Instead, I have suggested that there is enough variability, for example, for the use of both the long and short forms on *winik* and *haab'* in distance numbers to require both epigraphers and linguists to provide an answer or at least an hypothesis as to why it occurs. Denying its existence is not an option. Second, Robertson et al. (2004:282) take the stand that “the use of *-ij-iiy* on numbers . . . is consistent, **never showing the variability that he [Wald] suggests is the norm**” (emphasis added). If their statement implies a lack of variability in the use of the *-ij-iiy* enclitic on numbers, which it clearly seems to do, then their statement is, at best, misleading and, at worst, completely false. The use of these forms on time-period nouns and numbers in the inscriptions shows much the same variability. When evaluating this statement, one must also keep in mind that they somehow feel free to include non-numbers such as the noun *haab'* under the term “numbers” when referring to my commentary on the Copan Altar F' inscription (see Robertson et al. 2004:282). To start with, recall the examples that have already been provided showing the variability in the use of the *-ijiiy* ∞ *-iiy* enclitic on numbers and time-period nouns, the latter of which they erroneously classify as “adverbs.”³⁰⁸ They also note that these time-period nouns behave the same as numbers in this regard and indeed are directly referring to these time-period nouns when they state: “In the text Wald cites from Copán, the numbers make rigid use of these elements, in total distinction to the verbs within the same text” (Robertson et al 2004:282).

What is true of the Copán text (shown earlier in Figure 286), is that the time-period nouns *winik* and *haab'* do indeed have the form of the enclitic attached that occurs most frequently with them in similar contexts, that is, *-jiiy* and *-iiy* respectively. This provides us already with two forms of the enclitic, one of which, the *-jiiy* (glyphic **ji-ya**) that is most often attached to *winik* ranging over hundreds of years and documented at most sites that have texts long enough to include distance numbers. An example of the

³⁰⁸“It is important to observe that the form **-eej* is a suppletive (irregular) form of ‘day’, since other **adverbs of time, such as **ha'ab'*, ‘year’**, are substitutable” (Robertson et al. 2004:264, emphasis added).

same form of the enclitic on a number that it not an explicit time-period noun, *waxakjiiy*, is shown above in Figure 210. But there are also examples of numbers that expressly write a longer form of the enclitic in distance number contexts, an example of which, *ho'laju'nijiiy*, is shown in Figure 211. These examples are by no means unique. One must either transcribe them differently, for example as **winikijiiy* or **ho'laju'njiiy* instead, or admit that they do represent two different phonetic, albeit not allomorphic, forms. As noted in the earlier discussion of these examples, most of the time, numbers that end in /k/, a velar plosive stop, take a *-jiiy* enclitic and numbers that end in /n/, take an *-ijiiy* enclitic. Another factor in some cases also seems to be the length of the stem to which the enclitic is attached. However, variation based upon the stem length is not applied in anywhere near the regularity as that involving the presence of a final *-n* in the stem.

There is surely no evidence at all that these two forms have different meanings or different semantic connotations. Instead, as already suggested, there may be phonetic forces at work here, which cause the differences. But there are probably also differences of dialect, local usage, and even style at work in some of the variation. Such forces may be at work in some of the variation that takes place among the two most common time-period nouns that take the enclitic, *winik* and *haab'*. Some examples have already been presented above in Section 5.2.3, but some will be repeated or added here. This variation can even be seen in examples chosen originally for different reasons elsewhere in this study. For example, **WINIK-ya** *winikiiy* has already been illustrated in Figures 208 and 209. *Haab'jiiy* written as **HAAB'-ji-ya** is also included in Figure 209. In these and other similar examples, the meaning and function is the same, only the shape is somewhat different.

Finally, there is also another type of variation, already discussed in the same earlier Section 5.2.3, that has more to do with different styles and discourse patterns than varying forms of enclitics. Sometimes all of the time-period nouns, except that for day, include a form of the enclitic as in Figure 201. Sometimes, only one of them includes an

enclitic such as in Figure 200 and Figure 202. Because the *-ij* enclitic means both neutral and future, that is, non-past, it can appear on *winik* in a pronominally back-referenced distance-number context as long as the past temporal enclitic occurs on another time-period noun in the same calendric count as in Figure 203.

Although only a few examples have been referenced here, these are already enough to give an idea as to the variation in both the forms and the presence of the *-ijiiy* ∞ *-iiy* enclitics on numbers and time-period nouns in the Classic-Period inscriptions. What is more, both the meaning and the function of this enclitic are consistent in all these variations. I am only left to wonder how it is that Robertson et al. (2004:282) can justify the statement that “the use of *-ij-iyy* **on numbers** . . . is consistent, **never showing the variability**” that I supposedly suggest. For my part, I can only rely on the data from the inscriptions, which do indeed verify my view of both the presence of the forms *-ijiiy*, *-jiiy*, and *-iiy*; and the usage that I suggest for this adverbial enclitic in all its rather limited allomorphic and phonetic varieties.

Indeed, I have no “theory of orthographic imprecision” as they state (Robertson et al. 2004:282), but rather a goal of paying very close attention to what the scribes have actually written, to the contexts in which these forms appear, and to the leads that the historical analysis of these forms provides for explaining how they might have come to be written as they were. It is not correct that I state these forms “are totally interchangeable.” There are reasons for the differences, some of which I have already stated here and in previous sections. What I do not believe is that a difference in spelling must always equate to a difference in meaning but rather this variation may also reflect phonetic, stylistic, and dialectal differences, among other factors. A comparison with the various forms that exist among the Ch’olan languages of Colonial and modern times, as has already been done in Section 5.2.2, illustrates how descendants of these enclitics can take different forms but still preserve the same meanings and functions. To dismiss a whole group of attested occurrences a priori and out of hand as “bizarre” or “anomalous” is not a solution that serves the furthering of analytic insight, but rather represents a

rejection of the evidence or at least a refusal to address it. If these spellings are truly errors, one must at least present a coherent theory as to how they came about and why the same supposed “mistakes” would occur at widely separated polities.

Although Robertson et al. transcribe the anterior enclitic themselves in various contexts as *-ijiiy*, *-jiiy*, and *-iiy*, they seem to deny that these three forms actually occur in similar contexts on numerical adjectives, time-period nouns, and verbs. What is more, they seem to reject data that does not agree with their theory using value-laden terms without any further justification for that rejection. They ask the question, “why do they never vary in this way on positional verbs . . .” (Robertson et al. 2004:282). In fact, they already had access to a newly found example of just that variation on a positional verb in the Palenque Temple XIX Platform (see Figure 285 above) although they may not have recognized it as such at the time. But finding data that was projected as possible under the alternative I offered some years ago, which was contrary to an earlier theory of theirs, had not changed their basic approach in the past although my new approach has led to considerable modification in their views. An option would have been to simply add it to their list of “anomalous” examples as in the case of “root intransitives.” They could have simply turned it into a question by changing the type of verb stem to which they make reference in the statement in which they ask “why do they never vary in this way . . . , **excepting the single example from Copan**, on root intransitives?” (Robertson et al. 2004:282, emphasis added). This question could now be expanded to include intransitive positionals, transitive resultatives, antipassives, passives, and even gerunds.

Finally, the following is one more criticism they have of what they state is my approach:

A second, related point is that Wald conflates homophonic morphemes. In the glyphs, passive verbs such as *si[h]y-aj* (held by us to be in the present tense) and the syncopated form *si[h])y-j-iiy* (believed by us to yield the past tense) manifestly do not make use of the element descending from Common Mayan **-ej*,

‘time unit’ (see above). Rather, the *j* comes from an entirely different morpheme, *-aj*. (Robertson et al. Stuart 2004:282)

I most certainly have never stated that the *-aj* of *siyaj*, or *si(h)yaj* as they transcribe it, was not the source of the *j* in *siyjiiy*, their *si(h)jiiy*.³⁰⁹ Instead, I argued at one time that the *j* could represent the merger of the *j* of *-aj* and the *j* of *-jiiy*. It is not manifest that this compound does not make use of the *j* of *-jiiy* as well, but its presence is not provable because the phonetic results would be the same in either case. That is why I no longer argue that point for any stem with a suffix that ends in *j* written with a **ji** syllabogram unless, of course, it is also followed by another **ji** syllabogram to write a second *j* in the same word. However, since their interpretation of the enclitic as a tense suffix ties them into rejecting the occurrence of *-ijiiy* or *-jiiy* on verbs as “bizarre” and “anomalous,” they completely reject out-of-hand all such examples, the number of which keeps mounting along with new archaeological finds.

6.5.9.3.2 Response to Interpretation of First Part of *-ijiiy* as Resultative Aspect

MacLeod (2004:308) has recently suggested that all these examples of the long form of the enclitic on verbs may instead be examples of “perfect” inflection extended to all sorts of verbs classes and even to a gerund or nominalized verb. As has already been noted above I agree with MacLeod’s proposal concerning the presence of the transitive resultative (her “perfect”) inflection *-VVj* on transitive verbs in Classic Ch’olan.

However, I do not agree that there is adequate historical, linguistic, contextual, or glyphic

³⁰⁹The difference here is not relevant for the issue at hand, but I would interpret *siyaj* as a root derived as an inchoative rather than as a passive. This is based upon the Ch’olti’ word that Morán (1935c:32) gives as *tziahi* listed under the Spanish meaning “formado” (“formed”) with the added translation of “viviente” (“living, alive”). He also includes it as *tzialez* and *tziael* under the Spanish entry “engendrar” (“beget, engender”) (Morán 1935c:28). Although there are unresolved issues with this proposal as well, lacking a transitive verb not derived with a causative suffix, it is possibly an *-aj* inchoative derivational suffix that is present in Classic Ch’olan. If so, *siyaj* would mean “become alive,” that is, a semantic equivalent of “be born.” However, one’s stance on the interpretation of this verb form is not directly relevant to the point being made here.

support to explain the presence of this transitive resultative inflection in *-VVj* on the stems just discussed in the last section or indeed on any intransitive verbs or gerunds in Classic Ch'olan.³¹⁰ It can also be demonstrated that this solution for **ji** on some of the examples already presented here provides no explanation at all for the presence of the second **ji**.

MacLeod's analysis of the Tortuguero Box inscription that is shown above in Figure 203, is somewhat different from that proposed by Robertson et al. (2004), but suffers from some of the same limitations. She proposes the transliteration **'OCH-B'IH-ji-ji-ya** and the transcription *och-b'ih-i(i)j-iiy*. In order to explain why she only transcribes one of the two **ji** syllables, she states "The hypercorrect spelling **'OCH-B'IH-ji-ji-ya** is an intentional strategy which disambiguates a morpheme *-ij*" (MacLeod 2004:308). I fail to understand how this can be considered a hypercorrect spelling of the resultative suffix. Clearly, two **ji** syllables with exactly the same purpose, seem to result rather in writing something else altogether, as I have suggested in this case, a short form of *-aj-ij-iiy* with the *a* elided as expected in such circumstances. Shortening by leaving out certain vowels and even syllabograms is not unknown in specific types of cases. Adding additional syllabograms as phonetic complements is also well known. However, in this case a syllable **ji** is added and syllabograms such as **ji** do not ever take identical syllabograms as phonetic complements.

In other similar cases in which the vowel of each of the two syllables is different, such as in **WA'L-ja-ji-ya** in Figure 277 and **ma-'AK-ja-ji-ya** in Figure 269, each of the syllables serves a specific purpose. The purpose of the **ja** is to write in the normal way the usual *-aj* suffix. The purpose of **ji** in them is to help write the following *-iiy* enclitic.

³¹⁰I can understand well the impulse to extend the discovery in the Classic texts of a heretofore unrecognized construction beyond supportable grounds. When I first proposed the presence of the enclitic *-ijiiy* ∞ *-iiy* on verbs in the classic period, I expanded its boundaries to include examples on which only *-ij*, written as glyphic **ji** was attested including **'u-KAB'-ji**. MacLeod has clearly demonstrated that this represents instead the resultative (her "perfect") form of this verb and that the enclitic is not present on it. However, I believe that it can be just as clearly demonstrated that on the examples presented here in the previous sections, just the presence of a **ji** syllable alone or, in some cases a second **ji** syllable, is not sufficient justification for calling it resultative inflection.

In most similar passive, intransitive positional, and other constructions with suffixes ending in *-j*, such as **CHUM-la-ji-ya** *chumlajiy*, **CHUK-ji-ya** *chu[h]kjiy*, and **tz'a-pa-ji-ya** *tz'a[h]paji*, only one syllable is required to accomplish the same purpose.³¹¹ Even if it were possible for an antipassive verb to be inflected with a transitive inflectional suffix, there would still be no need in the present **'OCH-B'I(H)** case to repeat the same syllable. Instead, the most likely hypothesis is for the consonant of the second **ji** to be used with the previous vowel to write *-ij*, the first part of the *-ijiy* enclitic.

What is more, as already noted above as well, when the enclitic does not appear on **'OCH-B'I(H)**, the glyphic suffix is regularly **ja**. This suffix is necessary to write the *a* that derives the nominal compound as a transitive verb and then the *j* to derive it as an antipassive: *ochb'ihaj*. I have already argued that point above and also pointed out that the T181 syllabogram often writes the suffix *-aj*, sometimes alone and sometimes with another **Ca** syllable, on many different verb forms. This *-aj* can represent different suffixes that have several different functions.³¹² With that in mind, I must completely disagree with MacLeod's proposal "that this *-ij* is an intransitivizer plus perfect marker whose underlying form is */*-i-ej/*" (MacLeod 2004:308). This supposed reconstructed *-i* intransitivizer is **never attested** elsewhere with this *ochb'ih* compound. It is instead a transitivizer that is needed and this **transitivizer is always attested as *a* and not *i***. It is then the *j* suffix that derives the intransitive from the stem previously transitivized by *a* from a compound noun made up of the verb root *och* plus the noun *b'ih*.

When the *-iiy* or *-ijiy* enclitic is attached, the *a* is not written because it is likely elided in speaking as well. This second **ji** is, then, not a "hypercorrect" spelling but rather writes a perfectly legitimate allomorph of the enclitic *-ijiy* ∞ *-iiy*. A "hypercorrect" spelling, if one chooses to use that term, would have the first **ji** be instead a **ja** since that

³¹¹It should be noted that in this study **a hugely disproportionate number of unusual forms have been illustrated and discussed**. In many cases there are dozens and more occurrences of the usual forms for one or two of the unusual ones. Those unusual forms are important for establishing the boundaries of possible spellings but **they are not the norm**.

³¹²This is another example of why the "morphosyllable theory" does not ring true. The purpose of the scribe is to write a suffix with a particular phonetic character and not one that can only represent a particular morpheme.

is indeed what the suffix requires when the enclitic is not present. It is also what is present in all the other “hypercorrect” spelling of positionals and passives that have been illustrated and discussed. A few scribes use **ja** instead of **ji** in those cases on positionals and passives because they either wish the *-a* of the suffix to be pronounced in those contexts or are simply being “hypercorrect” by demonstrating their realization that the *a* would be pronounced if the enclitic *-iiy* had not been added.

Of course there is an additional and equally problematic aspect to this particular proposal. After MacLeod’s discovery of the **transitive** resultative (“perfect”) in the Classic Ch’olan texts based upon its existence in Tzeltalan as a **transitive** resultative suffix, it is quite surprising that she would now argue for its presence on derived **intransitive** verbs. This strange turn of events will be addressed soon. But first it should be noted that MacLeod also proposes a similar solution for both the quasi root-intransitive verb compound *uhtijiiy* and the passive verb form *johyijiiy* on Copán Altar F’ shown in Figure 286, although she states only that “future analysis of this challenging text may justify a perfect interpretation.” She does not comment on **HUL-le-li-ji-ya** written on the same monument except to parse it as *hul-el-ij-iiy-Ø* and translate it as “had been in a returned state.” MacLeod (2004:309) does group it together with the others as “verbs and participles with the *-Vj-iiy* suffix.” This would seem to imply that this is indeed a suffix and not an enclitic. It is not clear to me how she would equate the past perfect translation of the gerund here with the perfect she finds on verbs. Of course, we have already discussed that a past perfect English translation of many texts that include distance numbers and the adverbial past temporal enclitic is a perfectly legitimate translation and has been used by epigraphers for over twenty-five years. However, translating it as such does not and should not be equated at all to identifying that enclitic as past perfect inflection.³¹³

MacLeod does not comment on the other examples of the long allomorph of the past enclitic *-ijiiy* on verbs that have been presented in this study. Some of them were not

³¹³I will address MacLeod’s misinterpretation of the Acalan Chontal reflex of the past temporal enclitic *-ihi* as past-perfect inflection later.

included in earlier writings based upon my dissertation research. However, her general approach that somehow these and similar examples represent transitive resultative inflection on intransitive verbs is contrary to the whole nature of the resultative as attested in the Tzeltalan languages. In general, the history of the Tzeltalan resultative provides evidence of a clear distinction between transitive and intransitive forms, as already outlined in detail in Sections 4.6 and 5.1 above. This is especially clear in the case of Tzotzil which also attests an *-oj/-ej* suffix for the transitive resultative in Colonial Santo Domingo Zinacantán but only an *-oj* suffix in Modern San Lorenzo Zinacantán. For the intransitive resultative, the evidence points to an *-om* suffix in Colonial Tzotzil and an *-em* suffix in Modern Tzotzil. There is no evidence at all of a crossover between the transitive and intransitive resultative suffixes. Since the transitive-intransitive distinction plays such an important role in ergative languages, in all the Mayan languages, and in the language of the inscriptions, evidence of such a crossover would have to be very strong indeed to argue for its presence in these examples. On the other hand, the two forms of the enclitic are well documented throughout the Mayan languages. If one accepts its presence in any form at all on verbs, an explanation based upon attested variation in enclitic forms seems more believable and more straightforward than a hypothetical unmotivated and inexplicable break in grammatical continuity. In sum, I agree completely with MacLeod (2004:317; emphasis added) “that there is persuasive evidence for its interpretation as an active perfect marker for **root and derived transitives** in the script.” I do not agree that there is any evidence at all for its presence on **intransitives** in that same body of texts.

Finally, even if one were to agree, contrary to all Tzeltalan evidence, that the three examples of intransitives mentioned by MacLeod did indeed include the transitive resultative inflection, one would still have to explain the presence of the second **ji** sign in the examples of **’u-KAB’-ji-ji-ya ukab ’ijijiiy** included in Figure 282, Figure 284, and Figure 285. These examples are not addressed by MacLeod but do seem to provide indirect evidence for the interpretation of the second **ji** syllable and the **ya** as writing the

-*ijiiy* enclitic form. One can hardly explain as “hypercorrect” spelling, the writing of two **ji** syllables when only one is actually used to write the transitive resultative. Neither would that explanation justify the two **ji** syllables on **WA’L-ji-ji-ya** *wa’ljijiiy* shown above in Figure 285.

There are examples of the verb form *ukab’iiy* that are written glyphically as **’u-KAB’-ya**, one of which was illustrated above in Figure 236. In this case, MacLeod states that “The late spelling **u-CHAB’-ya** at Piedras Negras . . . perhaps also reflects a loss of *-j*” From this she concludes that the resultative inflection is present on this verb and others **even when it is not written glyphically**. I have already argued above that the resultative is by no means required in these and other similar contexts and is surely not an unmarked aspect to be assumed even when not written or spoken. The message is somewhat different but still makes perfect sense without the resultative (“perfect”) aspect being involved at all. The enclitic can clearly be used on the verb *ukab’i* even when it is not inflected for the resultative.

The resultative is clearly not the same as the English perfect either in Tzeltalan or in Classic Ch’olan. On *ukab’iiy* just as on other verbs that are not inflected for the resultative, the enclitic still indicates the direction of the referent of the dependent pronoun. In these cases, the referent is the subject of the derived transitive verb *ukab’iiy* and the location of that referent is earlier in the discourse as is indicated by the adverbial enclitic *-iiy*. Resultative inflection is not a required

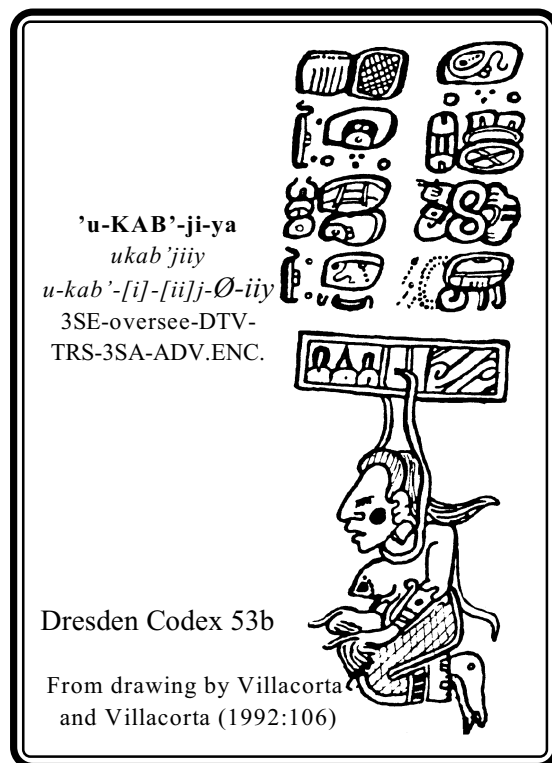


Figure 288. Transitive resultative inflection plus past enclitic in Dresden Codex

element of these sentences as is the perfect in somewhat different contexts in English or Spanish. Indeed, if this form does represent later spellings, it may instead portend the absence of the resultative from all of the Colonial and Modern Ch'olan languages. However, one should also not forget that the resultative plus enclitic form of *ukab'jiiy* persists even in the much later document, the Dresden Codex, as shown in Figure 288. Nevertheless, arguments against MacLeod's suggestion that the early 17th century *Paxbolon-Maldonado Papers* contain examples of the "perfect" will be presented after a more detailed discussion of the forms of the temporal deictic enclitic in that document.

7 Tense, Aspect, and Temporal Adverbial Enclitics in Classic Ch'olan

7.1 Brief History of Search for Tense and Aspect in Classic Inscriptions

7.1.1 Search for Preposed Tense-Aspect Particles

In the early 1980s, Linda Schele (1982:9) made the observation that “some form of early Ch'olan is accepted by most epigraphers and linguists as the language of the Classic inscriptions.” Attention to the detail of the vocabulary and grammatical structure of this family of languages, its closely related sister family, Tzeltalan, and their well-documented neighboring Yucatekan family led to many decipherments and to insights into the structure of the language of the Classic-Period texts. Comparative linguistics has also proved to be an indispensable tool in interpreting the structural and grammatical forms represented in the

language of the texts. However, in some cases, features that were predicted and expected based upon such empirical and analytic knowledge were never found. For example, in the 1970s and early 80s, the use of verbal prefixes, proclitics, and pre-verbal auxiliaries to indicate tense and aspect in the Ch'olan, Tzeltalan, and Yucatekan language families led epigraphers to search for them in the inscriptions. Examples of some of these forms are shown in Figure 289. But as Schele

Colonial Tzotzil (adapted from Haviland 1988:109)

x-	<i>tal</i>	y-	<i>al</i>	<i>-bey</i>	<i>-on</i>
NEUT	come	3sErg	say	BEN	1sAbs

“he comes to say it to me”

Modern Tzotzil (adapted from Delgaty and Ruíz Sánchez (1978:417)

ta	x-	<i>i'</i>	<i>abtej</i>
INC	NEUT	1sgAbs	work

“yo trabajo, yo trabajaré”
“I work, I will work”

Ch'olti' (adapted from Morán 1935a:10)

x-	<i>in-</i>	<i>cal</i>	<i>-e</i>	<i>-n</i>	<i>-Ø</i>	<i>ni</i>	<i>chol</i>
SBJ/FUT	1sErg	plow	tv	INC	3sAbs	1sErg	field

I will plow my field

Ch'ol (adapted from Warkentin and Scott 1980:37)

ti	<i>a</i>	<i>mañ</i>	<i>-ä</i>	<i>-Ø</i>
COM	2Erg	buy	tv	3sAbs

You bought it.

Figure 289. Examples of types of verbal tense and aspect prefixes expected in Classic-Period texts

(1982:10) noted already in 1982, “the writing system is notable for the absence of signs which appear in positions that suggest that they are preposed tense-aspect particles.” The pattern that was expected because of evidence from many colonial and modern Maya languages could not be documented in the script, as was also noted by Hopkins (1988a:10) and Hopkins and Josserand (1988a:9).

As that history illustrates, the tools necessary to make progress in the linguistic analysis of the Classic Period texts have proved to be analogous to double-edged swords. They serve to facilitate insights into those texts, but can also impede progress when a belief in the existence of expected grammatical forms persists despite a relentless lack of empirical evidence. There are many other examples of such hypotheses built upon comparative linguistics besides the one already mentioned. Although often based upon valid observations in other languages, many anticipated forms and structures ultimately prove to be lacking in the texts themselves. All epigraphers and linguists who have been involved in attempting to interpret or reinterpret the verbal system and many other grammatical structures in the hieroglyphic texts, including the author of this dissertation, have formed hypotheses based upon patterns noted in closely related Mayan languages and have found hints of their presence in the script, only to realize later that there is not enough evidence to support those hypotheses. This is as it should be in a scientific endeavor. The real problems come from not paying enough attention to the content of the texts themselves and trying to force one’s hypothetical structures and grammar upon texts that cannot really support them. If one persists too long in the defense of a *langue* that is not supported by the *parôle*, further progress is often impeded.

7.1.2 Search for Incompletive and Completive Aspect Suffixes

Faced with a lack of tense and aspect prefixes in the inscriptions, attention turned toward distinctions indicated instead by suffixes. The footing under the incompletive-completive distinction also seemed firmer because it existed to some degree in all the Ch’olan and Yukatekan languages. For example, although Ch’ol and Yukatek had some

preposed auxiliaries and particles, they also both made distinctions between incomplete and completive aspect by means of suffixes. This was also true, in general, of the Ch'olan languages, Ch'olti' and Chontal, and of the other three Yucatekan languages, Lakandon, Mopan, and Itzaj. What is more, around that time, Kaufman and Norman

	root tv	derived tv	iv <u>a</u>
incomplete	{ *-v *-e ⁷ and/or	*-(v)n <u>b</u>	*-el
completive	{ *-v *-i and/or	*-∅	*-i
imperative	*-v ₁	*-(v)n <u>b</u>	*-en

Table 11. Proto-Cholan status markers. ^a Other patterns of intransitive verb inflection existed in proto-Cholan but are not reconstructible at present. ^b The parenthesized vowel indicates that in a stem ending in -a, the addition of this suffix causes the -a to be replaced by -a.

(Kaufman and Norman 1984:93)

Figure 290. Proto-Ch'olan status markers reconstructed by Kaufman and Norman (1984)

(1984) prepared a reconstruction of Proto-Ch'olan, shown in Figure 290, that preserved the incomplete-completive aspectual distinction while omitting most of the tense/aspect prefixes and auxiliaries that had been previously considered possible for use in the Classic-Period texts. With this modified hypothesis in mind, the search for incomplete suffixes began, for example, for *-n* on transitives, *-el* on intransitives, and *-tal* (and *täl* or *tel*) on positionals. However, these reconstructible suffixes were difficult to find as well.

7.1.3 Search for Split Ergativity

Although all of the Mayan languages are ergative, several of them also share an additional characteristic, that of an ergative split, as it is most often called. Among this group are all of the Yucatekan and Ch'olan languages. While intransitive verbs use the absolutive (Set B) dependent pronouns or person markers to represent their subjects in

ergative verb systems, both Yukatekan and Ch'olan, with one exception, depart from this by employing instead the ergative (Set A) person markers for the subjects of intransitive verbs when they occur in the incomplete aspect.³¹⁴ Because of this ergative split, it had been supposed for some time (cf. Bricker [1980] 1985 and MacLeod 1982) that this pattern would also be found in the Classic Period inscriptions. In order to attest the predicted system, it would be necessary simply to find intransitive verbs in the incomplete aspect and then check which person marker was used. One of the problems this theory faced was the one just mentioned above, that is, locating the expected incomplete forms.

Victoria Bricker (1985:70) suggested looking for an example of incomplete aspect in a different form. Noting certain glyph blocks in verbal position using T1 and T104 as prefixes, deciphered by her then as 'u and yV respectively, and T181 **ha (ja)** as a suffix, she noted a pattern that seemed to fit the one expected "for intransitive verbs in split-ergative languages such as Chol and Yucatec." In line with this, she suggested that "at the ti[m]e when the hieroglyphic writing system was in use, T181 served as the general perfective suffix for both transitive and intransitive stems."

Although not all of the details of Bricker's interpretation were generally accepted at the time, one of her examples in particular did catch on as a likely candidate

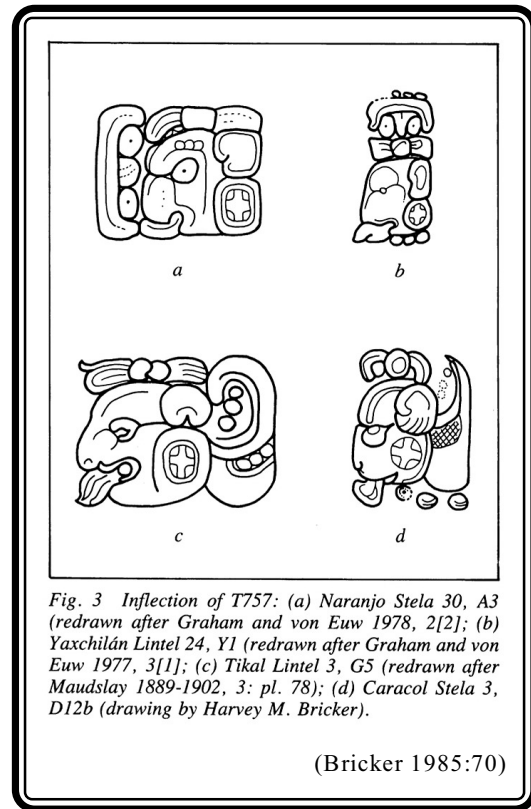


Figure 291. Proposal of *ub'ah* (*ub'aah*) as candidate for verb displaying split ergativity

³¹⁴Ch'orti', an Eastern Ch'olan language, differs in that it accomplishes a type of ergative split by introducing instead a third set of markers for the subject of intransitive verbs. This set is often called Set C.

for split ergativity. As examples of evidence for split ergativity Bricker pointed out otherwise poorly explained forms such as **'u-b'a-hi** and **b'a-hi-ja** and **b'a-hi-ja-ji-ya** as shown in Figure 291 from her article.

These forms are all based upon a root *b'ah* (*b'aah*), which often occurred in what was otherwise the verbal position, that is, clause initially, although most often without a preceding date. In context, this proposed “verb” seemed to have only one argument, so it could hardly have been a transitive verb. Although the same word form (*ub'aah*) was used elsewhere as a reflexive following a verb, Bricker (1985:71; 1986:146) suggested that in these contexts without a preceding verb, it was instead itself an intransitive verb meaning “he/she/it goes” as documented for Tzeltalan. Since it was intransitive and prefixed by the 3rd person ergative person marker *u-*, then it “must” be incompletive. But if it were indeed intransitive, an ergative system should use instead the absolutive (Set B) and not the ergative (Set A) pronoun *u-*. Because it used the Set A pronoun *u-*, the hypothesis that the inscriptions recorded a split-ergative system seemed to be borne out.

At the same Fourth Palenque Round Table in 1980 at which Bricker presented her views concerning **'u-b'a-hi** and related constructions, Josserand, Schele, and Hopkins (1985) addressed the same construction from a different angle. They noted the similarity between some of the T1.T757 (**'u-b'a-hi**) constructions and a similar pattern or type of clause attested in Ch'ol. It consists of an auxiliary verb followed by the preposition *ti* and a gerund (“verbal noun”). They dubbed these “*ti* constructions” (see also Schele 1982:58). They referred to examples from Ch'ol such as in the progressive form *woli ti alas* for “he is playing” (Schele 1982:60; cf. Aulie and Aulie 1978:189) and *mi' kaj ti lok'el* “He will come out” (Josserand et al. 1985:98; cf. Whittaker and Warkentin 1965:126). They considered “T1.T757” to be “a ‘general verb’ without specific semantic reference to the particular event.” When this view was combined with Bricker’s reading of *b'aah* as “goes,” and the suggestion of the presence of split ergativity, it seemed that the search for an incompletive form in the Classic texts had been successful (cf. Schele and Mathews 1993a:62-63).

Eventually, however, one of the two main proposed “auxiliary verbs” identified in passages from the Classic-Period inscriptions proved to be a construction with *ak’ot* or *ak’taj* for “dance” deciphered by Nikolai Grube (1992). It is followed by the preposition *ti* and the type of object held in a dance or a costume worn in a particular type of dance. The second column of signs in Figure 292 illustrates a particular instance of this from a Yaxchilan area lintel: **’ak’-ta-ja ti-CHAN-na** *ak’taj ti chan* “He danced with a snake” (cf. Grube 1992:213).

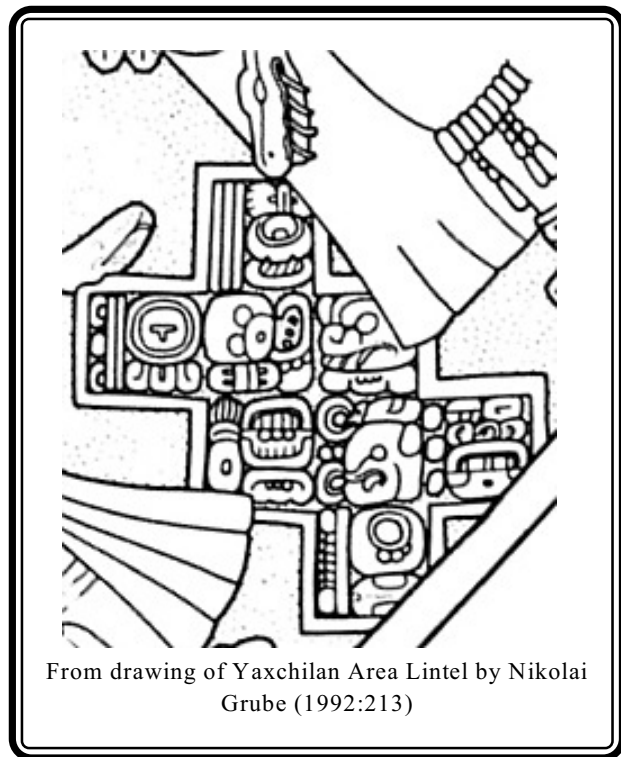


Figure 292. Dance verb once interpreted as auxiliary verb attesting split ergativity

The other proposed “auxiliary verb,” *ub’aah*, which was also involved in Bricker’s split-ergativity proposal, was later re-interpreted in these contexts as a possessed noun meaning “image” or “body” by Houston and Stuart (1996:299) and later as “image,” “portrait,” “self,” “head,” and more by the same two authors (Houston and Stuart 1998). Again, the *ti* was used in those contexts simply as a preposition and the object of that proposition was a noun or nominalized verb. There are numerous examples of *ub’aah* being used in this way in verbless stative sentences one of which is shown in Figure 293. The portion of the sentence included here can be transcribed as *ub’aaj ti ak’at ti chak k’at* “It is his image in a dance with [the] basket.”³¹⁵ The person who is the

³¹⁵The decipherment of **CHAK-K’AT** was proposed by Nikolai Grube (1992:212). A separate issue is the spelling *ub’aaj* instead of *ub’aah* (cf. Grube 2004a for more detail on the /h/ and /j/ distinction in the Classic script). There is little doubt that the noun **b’ah* (**b’aah*) “image” ended in a final glottal /h/ historically in Proto-Ch’olan (cf. Kaufman and Norman 1984:116). However, the /h/-/j/ distinction has
(continued...)

referent of the dependent pronoun, a *sajal*, is shown with a staff topped by a basket and a *k'awiil* figure. The staff itself is actually being held by the Yaxchilan ruler *Yaxun B'ahlam* but the implication is likely that both were performing the dance.

An *ub'aah* construction is often used to refer directly to an image of a person depicted on the monument. Sometimes, as in the Yaxchilan Lintel 6 passage, it also includes a mention of the action that the person is depicted /performing. Since such references would otherwise likely be expressed in the incompletive aspect, it is not hard to see why those examples were so conducive to that

interpretation prior to being reinterpreted. But now the lexical argument was bolstered by what had been recognized anyway, that the person named in the *ub'aah* clauses was almost always depicted in the iconography. Considering both the broad range of meaning for *b'aah*, for example, Wisdom's Ch'orti' (1950:577) includes "body, self, a being, a spirit," its repeated reference to depicted images in other contexts without the *ti* phrases, and the prominence of similar verbless sentences in many Mayan languages, Stuart and Houston's new interpretation was quickly accepted. In such contexts, it could then no longer be interpreted as a verb at all but rather as a possessed noun. Without the *ub'aah* example, it seemed that no relatively frequent examples of split ergativity remained. This was enough for Schele (Schele and Grube 1997:32), for example, to agree that split

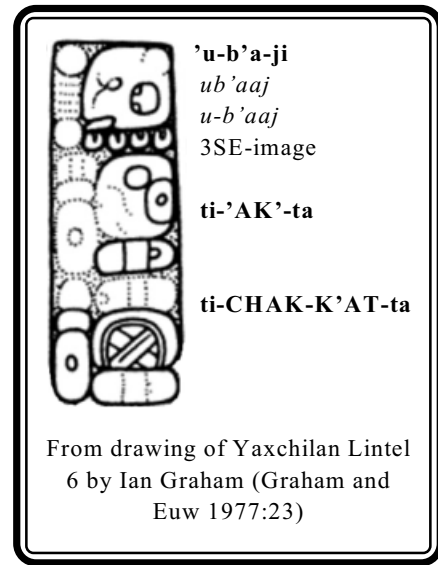


Figure 293. Sentence with *ub'aaj* referring to depicted image

³¹⁵(...continued)

since been lost in all of the current Ch'olan languages. This process had started already during the Classic Period and the inscriptions of Yaxchilan provide evidence that it was one earliest sites to have lost it. Finally, the word for "dance" has been interpreted as *ak'at* here although *ak'ut* or *ak'ot* would be more likely in the modern Ch'olan and Tzeltalan languages. Because it is the object of a preposition it could hardly be a verb here. In its intransitive verbal form it is *ak'taj* and is usually written **'AK'-ta-ja**. Another transcription option might *ak'ta*, but it is hard to justify that form as a noun or a nominalized verb.

ergativity was not a characteristic of the Classic-Period written language, a view that had already been proposed earlier by Stephen Houston and later published in 1997.

7.1.4 Lack of Incompletive Aspect Inflection

Since a verbless or copula-less sentence with *ub'aah* can have temporal connotations similar to the incompletive aspect, it had fit well in the relevant contexts. However, its absence for consideration left few other possible examples of incompletive aspect suffixes in the inscriptions. One other occasionally suggested example of a possible intransitive incompletive, the so-called distance-number introductory glyph *utz'akaj*, did not receive wide acceptance as an incompletive verb in a split-ergative construction. However, this also left an unexplained lack of verbs inflected for incompletive aspect, although an incompletive-completive aspect system had been reconstructed for Proto-Ch'olan as shown in Figure 290 above. One factor sometimes used to justify this lack was the type of narrative encountered in the script. Much of the narrative was indeed historical. Since the monumental texts consisted mainly of reporting past events, the completive would apparently be the most anticipated aspect (cf. Wald 1998b). It was indeed the usual aspect used for the main timeline for historical reports in the post-invasion period when the Spanish script was used to write the Chontal language of the *Paxbolon-Maldonado Papers* and the various versions of the Yucatek *Chilam B'alam* documents. Of course, the incompletive still appeared regularly in all those Colonial-Period texts in its suitable contexts. Nevertheless, although this hypothesis by no means ruled out finding incompletive verbal forms in the inscriptions, it did provide a rationale for explaining why it might be harder to find.

With much lowered expectations of success, the search continued for a while for the most directly predictable incompletive suffixes as mentioned above, for example, *-n* on derived transitives, *-el* on intransitives, and *-tal* on positionals. As already expected, these would be rare if they existed at all because even unrelated suffixes of similar shape had not been found in any significant numbers. Over time, most of those in *-n* proved to

be either passives in *-naj* (cf. MacLeod 1990:287), antipassives in *-Vn* (cf. Lacadena 2000), or possible participles (cf. Wald 1997b). Most of those in *-el* or *-Vl* have proved to be suffixes on adjectives or nouns and not on verbs. In Classic Ch'olan, such suffixes are very rare on verbs although one example, *hulel-*, which was shown earlier in Figure 286, acts precisely as a gerund rather than as a verb inflected for the incomplete aspect. None of these have been demonstrated to perform as active verbs.

Some suffixes in *-tal*, hypothesized to be the incomplete suffix on positional verbs, eventually proved to be adjectival or nominal suffixes as well, for example *na'tal* and *yaxtal*, meaning “the first” or “first one, and *cha'tal* “the second.” Another, *chumtaal*, shown in Figure 294 was thought by some to be a better example of a positional incomplete.³¹⁶ However, in more recent times, since the mid 1990s, I have interpreted it instead as the adjectival positional root *chum* plus the suffix *-taal* (or *tal*).

This suffix appears in Wisdom's (1950) Ch'orti' as both *-tal* and *-tar* in many compounds with the general meaning “a place where something is done.”

Thus *ak'utar/ak'utal* (“dance” plus “place”) is a “dance hall” and *chontar* (“sell” plus “place”) is a “market” or “a place where something is sold” (cf. Wisdom 1950:480,706). So in light of this interpretation, the passage in Figure 294, *chumtaal* is the “seating place” or “throne” of the ruler. Indeed, right next to this inscription is an image of a ruler on a throne.

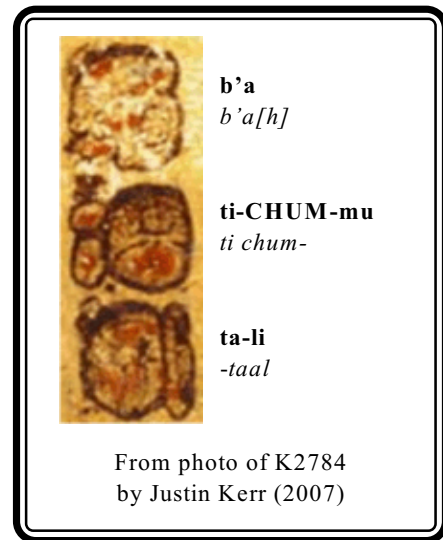


Figure 294. Compound noun in *-taal*, sometimes suggested as positional incomplete inflection

³¹⁶The interpretation of this particular construction as an incomplete form of a positional has recently been given a reprieve by David Mora-Morin (2005:3). However, no new information or evidence was provided by him that went beyond the earlier mistaken analysis of its form.

7.1.5 “The Shifting Now”: Incompletive and Completive Aspect Reinterpreted

7.1.5.1 Function of Incompletive and Completive in “The Shifting Now”

One of the main problems for the more “traditional” view of incompletive and completive aspect in the Classic texts was that, although it was well-based in comparative linguistics and concentrated on the correct language family, Ch’olan, the predicted incompletive forms had simply not been found. Advances in decipherment had ruled out the most widely accepted candidates for split-ergative verbal patterns. Searches for the well-founded reconstructions of incompletive aspect forms especially in the Ch’olan but also in the Yukatekan languages proved mostly fruitless. Proposed finds proved quite questionable and easily capable of different and more satisfying interpretations.

A more recent alternative for interpreting some of the most common verb morphology in the Classic-Period inscriptions, offered by Stephen Houston (1997), suggests that previous analyses, such as those just summarized above, have incorrectly characterized the aspectual inflection of most verb forms in the Classic texts. Whereas previous interpretations have judged most of the forms to be completive, this new approach suggested instead that the verbs making up the main timeline were inflected for incompletive aspect. The less common forms, those suffixed by glyphic **ya** (traditionally the AEI), were inflected for the completive aspect. The suggestion itself, that the verbal suffixes written partly by glyphic **ya** represent the completive aspect, was not new. Already in the middle 1980s, David Stuart (1987:43) suggested that, for example, **hi** in conjunction with **ya** could serve to spell the “perfective” (completive) verb form, as for example with positionals such as “**CHUM-la-hi-y(a)**, or *chum-lah-i*, ‘he sat’ . . . , the ‘anterior’ form of *chum-lah*.” He went on to write “The precise function of the *-i* suffix on these verbs is likely related to the common perfective suffix *-i* on intransitive verbs in both Cholan and Yucatec.”³¹⁷ So perhaps one of the biggest differences was Houston’s

³¹⁷Houston (1997:293, 301 and elsewhere) notes that this article is an outgrowth of his collaboration and discussions with both David Stuart and John Robertson. However, since Houston is the
(continued...)

emphasis on what he called the incomplete forms. According to this view, events on the main timeline are recorded in the incomplete aspect with intransitive verbs of all types (Houston 1997:297-300). This aspectual distinction is not formally made for “active transitive verbs” and Houston (1997:296) noted that “this absence of differentiation is attested in Cholti”.³¹⁸

Houston’s theory was enticing at first glance because it seemed to put an end to nagging questions concerning the seeming lack of incomplete aspectual forms in the Classic-Period texts. Indeed, under this new approach, the search had come to an end because all the forms previously considered complete were now dubbed “incomplete.” It provided a plausible rationale for some of the suffixes found on verbs, especially on root (CVC) intransitives, and so allowed the reader to clearly place the events into a narrative framework.

According to the new interpretation, the scribes report most of the events as currently in progress, as in a “shifting now,” while they view the rest, those with glyphic **ya** suffixes, as already completed at an earlier time. It is suggested that this is especially appropriate when the text is accompanied by the iconography of the monuments and ceramics (see also Stuart 1996:165). The illustrated events would then almost always be reported initially with verbs that, according to this new theory, are now newly interpreted as incomplete forms. The verbs used for back references would almost always be inflected with suffixes interpreted as complete.

In translation, the incomplete was interpreted as a sort of “historical incomplete,” similar to the English “historical present,” seemingly giving the events

³¹⁷(...continued)

only author listed, I have made no assumptions concerning the views of the latter two unless explicitly stated or unless taken from another source.

³¹⁸It is not immediately clear to me what “active transitive verbs” refers to here. The intent may be to distinguish them from verbs in the passive mood or “intransitive transitives” as Robertson (Houston et al. 2000a:330) classifies them. However, it should be noted that, in Ch’olti’, derived transitive verbs do not all take the same form in the incomplete and complete. Many take an *-n* suffix in the incomplete but not in the complete. In Ch’orti’ the derived transitives do take the same forms in both aspects. This distinction will become important later when discussing the complete and incomplete forms of verbs in Colonial and Modern Ch’olan languages which will be taken up in Section 9.2.

recounted in the narrative a renewed immediacy (Houston 1997:300). The reader of the text upon viewing the iconography is, in theory, led to re-experience the narrated event as currently in progress.

7.1.5.2 Problems with the Incompletive of “The Shifting Now”

Houston's new view of the Classic Period Ch'olan verbal system faced some critical problems. Most characterizations of the incompletive aspect in the Colonial and Modern Mayan languages stress its being used for actions that are habitual, repetitive, or ongoing from the standpoint of the speaker or writer (cf. Robertson 1992:64).³¹⁹ Most of the verbs taking the newly designated incompletive forms, however, do not seem to fit the match those characteristics semantically or discursively in the contexts in which they are found. First of all, many of them are bound to clauses with specific dates that are often accompanied elsewhere in the text by clauses with later dates. This alone would tend to favor the narration of specific, one-time events although not requiring it.

More important is the character of some of the events that are most often reported. Especially births, accessions, and deaths all tend to be one-time, noncontinuous events in the lives of the elites. If, as suggested by Houston, the incompletive aspect was intended to provide an “historical incompletive” (or “historical present”) narration of the depicted events as ongoing at the time of reading the text and viewing the sculpture, events such as bloodletting and conjuring rituals might fit the interpretation well. But in passages such as those mentioning the birth of a ruler, interpretations such as “On 9 *Lamat* 6 *Mol*, *Janab' Pakal* is born,” while by no means impossible, seem more difficult to justify.

³¹⁹Note that this view of the incompletive aspect's role is not based upon an “unconscious attempt to follow Western modes of structuring historical accounts, typically in the past tense” as stated by Houston (1997:296). It is instead based upon careful linguistic study by many scholars of primary sources in Colonial and modern Mayan languages both as written and spoken. Especially important here is a text written in a language closely related to that used in the Classic texts, Acalan Chontal. It is also reflected in the various *Chilam Balam* texts written in Yukatek. These observations are not intended to rule out the existence of texts that use the incompletive especially in continuous narrative. Nora England (pers. com. 2007) notes examples of narratives of that character among the Mam speaking communities. She suggests that this usage of the incompletive may indicate that the narrative itself is still ongoing.

To counter such objections, Houston suggests that such passages should be viewed as performance texts. “That glyphic texts were performed, with probable interpolations by readers and singers, is not a new proposal for either the Maya or other Mesoamerican groups” (Houston 1997:300). Perhaps if these passages were truly written in the present tense rather than the incompletive aspect, the “historical present” rather than in a somewhat incomprehensible “historical incompletive,” the task would be easier. Then one could simply say “On 9 *Lamat* 6 *Mol*, *Janaab’ Pakal* is born” without the idea of an “ongoing” process as would be implied by the incompletive aspect.³²⁰

7.1.5.3 Character of Incompletive Aspect in Colonial Documents

Houston’s newly proposed interpretation of the narrative timelines receives little support from the early colonial documents such as the Acalan Chontal and the “*Chilam B’alam*” documents.³²¹ In them, the incompletive aspect is usually used in narrating general or repeating events such as this from the *Chilam Balam of Chumayel*:

Mac - 13 marzo, licil yalancal aac

Mak, March 13, when the turtle **lays eggs**. (Luxton 1995:40-41).

However, when reporting on past events such as a one-time capture, the completive aspect is used, such as in this Acalan Chontal example.

Hain castilla uinicob yithoc padreobi ahuli uchuci cab . . . (Paxbolon et al. 1614:163.5-6)

³²⁰Houston (1997:291) describes the incompletive as indicating “ongoing” events and the completive as indicating “terminated” events. The other two options suggested by Robertson, that is, “habitual” and “repetitive” would surely not fit in the particular birth-report contexts that occur so often in the Classic texts.

³²¹It should be clarified that I have never stated nor implied that the incompletive aspect could not occur in historical narrative as implied by Robertson et al. (2004:278) in their statement, “First, it is simply not factual that colonial documents of any type, historical or otherwise, exclude the incompletive.” Instead, as the following clearly states, I point out rather that it is not normally used for verbs on the main timeline of the narrative.

Those Spanish men along with priests came and **captured** the land . . .

Contrast this with the incompletive from the same document.

*Hain xach natacal yuual **cathane** tabala . . .* (Paxbolon et al. 1614:164.32)

This then **I say** to you first . . .

Here is another passage in which the sense of the incompletive is that of the future.

*Yuual **uthane** uthan Dios unumelobi* (Paxbolon et al. 1614:167.1)

Then it is **their speaking** the word of god, their passing by.

Here the writer is presenting the reasons Diego de Pesquera gave for why the Chontal people had to move from Acalan to Tixchel. They were too far removed from Spanish priests who could teach them about Christian beliefs. In Tixchel they would be on the road from Mexico where priests could be teaching them as they pass by on their way to elsewhere. So this passage could also be translated colloquially as, “Then it would be their speaking (or teaching) the word of god when they pass by” as the accompanying Spanish translation implies “les enseñarían la palabra de Dios cuando pasasen.”

Finally, there are many passages such as the following in which the incompletive is used in subordinate clauses following a complete verb that sets the stage or serves as the main discursive timeline. An analysis of the aspect used for each verb is provided in brackets in the English translation.

Cahix ulaakbel** tupam frai diego de bexar **cahix upulcel (Paxbolon et al. 1614:165.10-11)

It began, then [completive plus deictic enclitic], **their being given** [incompletive (possessed gerund)] to Fray Diego de Bexar, it began, then [completive plus deictic enclitic], **their being burned** [incompletive (possessed gerund)].

It is, of course, “not factual that colonial documents of any type, historical or otherwise, exclude the incompletive.” as Robertson et al. (2004:278) correctly state. Their statement: “The briefest look at the Paxbolon papers, for example, reveals that the incompletive is very well attested” is also true as the examples just given above imply. But neither I nor anyone else I know of has ever made such an argument. Instead, what had been noted in the past is that the **main timeline** of the narrative in historical Colonial-Period texts is **cast mainly in the completive**. If indeed the “historical incompletive” interpretation were correct and the main timeline of the narrative were in the incompletive, the aspectual roles evident in the Colonial discourse patterns would represent an almost complete reversal of that pattern. In the Classic Period, the completive would have played a secondary role to the incompletive which would then be driving the narrative instead. This difference would be especially significant in light of the Acalan Chontal document since most of its content is historical in nature just as is that of most of the monumental inscriptions.

Insisting that “The practice among most epigraphers is to make blanket use of the past tense,” Houston (1997:296) suggests that a “more subtle motivation may be an unconscious attempt to follow Western modes of structuring historical accounts, typically in the past tense. While I do not find any evidence of either incompletive or completive morphological suffixes or prefixes in the Classic Period inscriptions, I maintain that the evidence from Colonial Period historical documents, including the *Paxbolon-Maldonado Papers*, clearly indicates that the completive aspect is used for main narrative timelines. Incompletive aspect is used for many purposes as well but not in a fashion consistent with Houston’s “historical incompletive.”

The *Katuun* Prophecies of the *Chilam Balams* may indeed provide a counter example more in line with what Houston proposes. The incomplete forms in them have usually been translated into English using either the present tense, as done by Roys (1967), or the future (as often done by Edmonson (1986) and Luxton (1995). Still, when the passages are more clearly historical, the authors return to the use of the complete aspect. The *Chilam Balam* texts were not explicitly mentioned by Houston in his article. At any rate, such comparisons with Colonial documents based solely upon genre and general discourse patterns, no matter which theory they support, can only serve as secondary corroborating arguments. The main support for or against one view or another must come instead from linguistic and contextual evidence, both comparative and secondary starting with closely related languages, and direct and primary starting with the actual texts themselves.

7.1.5.4 “Incomplete” and “Complete”: Traditional Definitions Versus “The Shifting Now”

In closing this discussion of Houston’s *The Shifting Now*, reference will be made to a few statements from the article itself that contain, as it were, seeds that could germinate into doubts concerning its grammatical, linguistic, and discursive validity. From the start, Houston’s definition of incomplete as “ongoing” and complete as “terminated” is much too narrow and therefore misleading. Although it may be theoretically possible that a language could have such a narrow application of this distinction, Comrie (1976:18), using the synonymous terms “perfective” and “imperfective” instead of “complete” and “incomplete,” warns against just such a misinterpretation as a point of departure.

A very frequent characterisation of perfectivity is that it indicates a completed action. One should note that the word at issue in this definition is ‘completed’, not ‘complete’: despite the formal similarity between the two words, there is an

important semantic distinction which turns out to be crucial in discussing aspect. The perfective does indeed denote a complete situation, with beginning, middle, and end. The use of ‘completed’, however, puts too much emphasis on the termination of the situation, whereas the use of the perfective puts no more emphasis, necessarily, on the end of a situation than on any other part of the situation, rather all parts of the situation are presented as a single whole.

In other words, the correct characterization of completive (Comrie’s “perfective”) should be based upon the word “complete,” that is, “whole” or “viewed as a whole,” and precisely not on the participle “completed” and, most assuredly, not upon “terminated.” This view is also reflected in Comrie’s (1976:3) description that the “perfective” (and so its synonym “completive”):

. . . presents the totality of the situation referred to . . . without reference to its internal temporal constituency; the whole of the situation is presented as a single unanalysable whole, with beginning, middle, and end rolled into one; no attempt is made to divide this situation up into the various individual phases that make up the action”

This characterization is so important to Comrie that it is the precise reason he avoids the term “completive” since it seems to him to be more easily misinterpreted to mean “completed” than would “perfective.” The imperfective (“incompletive”), on the other hand, is used to “make explicit reference to the internal temporal constituency of the situation (Comrie 1976:4). Finally Comrie (1976:4, emphasis added) summarizes the characteristics of both by making this comparison:

Another way of explaining the difference between perfective and imperfective meaning is to say that the **perfective looks at the situation from outside,**

without necessarily distinguishing any of the internal structure of the situation, whereas the **imperfective looks at the situation from inside**, and is crucially concerned with the internal structure of the situation, since it can both look **backwards towards the start of the situation**, and look **forwards to the end of the situation**, and indeed is equally appropriate if the situation is one that **lasts through all time**, without any beginning and without any end .

So it seems that, Houston's characterization of the incomplete as simply "ongoing" is also too narrow. As Bybee et al. (1994:141) notes "an imperfective that is restricted to the present would be indistinguishable from the present tense." But the incomplete "expresses both ongoing progressive action and habitual occurrence (at some reference time) and may also be used for states and gnomic situations" but "a present gram expresses a subpart of imperfective meaning" (Bybee et al. 1994:141).

What Houston's extremely limited characterizations actually do, is to bring incomplete and complete aspect quite clearly into line with the present and past tense. They put the stress on a narrow lane of similarity to the detriment of the wider lanes of difference between tense and aspect. It is therefore no accident that Houston's "historical incomplete" is indistinguishable from the "historical present." The original definition of incomplete and complete assures it. That may be why Houston seems to have no problem equating a Ch'olan incomplete with an English historical present. Both are defined as events ongoing at the present moment of the historical narrative.

These definitions may also be why he seems to have no qualms either in equating the complete with what in narrative context is much more like the English past perfect or "pluperfect." As already noted, it had been traditionally used to translate many of the distance-number passages connecting one event to another in the Classic-Period texts. After all, the English past tense and pluperfect as well as the complete in Mayan languages are all alike in that they can be used to present events as "terminated" from the viewpoint of the narrator. The problem is that such a narrow definition covers over their

real differences. Thus already in this earlier article the seeds were sown for the later switch to completely different labels for what Houston calls “incompletive” and “completive aspect” as happens in Houston et al. 2000b and Robertson et al. 2004). These developments will be addressed next.

7.1.5.5 Undercurrents of Better Solution

Houston also notes, in passing, certain characteristics of the Classic Ch’olan texts that, instead of supporting his view, actually provide evidence supporting the one that has been presented in this present study. One of them is that there are no morphological prefixes or suffixes in those texts marking either incompletive or completive aspect. For example, Houston (1997:297) notes:

Further, texts almost never begin with completives, nor do they tend to end with completives or transitives. Completives usually occur in toponymic statements specifying place of action or in discursive references to earlier statements. . . .³²²

But that is certainly not the usual way that completives in general behave. Even given Houston’s narrow definition of completives as indicating terminated action, there is no apparent reason why verbs in the completive aspect should not just as likely begin texts. Nor is there any apparent reason why such supposed completives should not often occur in single-sentence or short passages. But if the morpheme which Houston calls a completive suffix is instead an enclitic that, for example, shows the temporal direction of a back reference, there would **not** be many occasions for its use in such circumstances, except in distant-past contexts.³²³ Other than in those distant past contexts, the view I

³²²The statement concerning the low frequency of root transitives in such back references is valid but derived transitives occur very often in back references as noted above in the discussion of transitive resultative inflection in Section 4.7. It should also be noted that the enclitic *-iiy* that usually marks the temporal direction of such back references can and does occur on derived transitive verbs even when they are not inflected for the resultative.

³²³There may be some other isolated contexts in which the reference is assumed to be known either
(continued...)

have presented calls for pronominal enclitics connecting narrative statements referentially and adverbial enclitics indicating the temporal direction of those referents. In the context of distance numbers, a by-product is an indication of whether the count is away from a previous event or forward toward the next. Such an analysis provides a testable and verifiable reason as to why those particular morphemes seldom appear in single sentence or very short passages but are much more common in longer ones. Such a proposal is the most apparent, logical, and discursively expected, considering the texts themselves, and, it seems, is recognized backhandedly by Houston's (1997:298, emphasis added) own statements such as the following:

The completive is evident, even alternating with incompletives, but it principally defines and bounds temporal flow and the spatial setting of events (**a function usually performed by deictic particles**).

If the adverbial temporal enclitic *-ijiiy* ∞ *-iiy* is indeed not a completive aspect suffix, then there really are no other likely candidates to mark the completive in Houston's view. Although I do not use the amorphous term "particle" to classify this adverb, it surely performs the role that Houston otherwise ascribes to "particles."

7.1.6 Changing Views on Aspect Following Conference in Provo

Over the next few years following the publication of *The Shifting Now*, Houston, along with Robertson and Stuart, will struggle to justify modified forms of their views in light of my own viewpoints, an early version of which I presented to them in 1997.³²⁴

³²³(...continued)

because of imagery incorporated into a monument, because of mention in another text nearby, or because the knowledge is assumed to be widely and securely known by the reader. However, such contexts are also not common.

³²⁴I shared my research findings concerning the parallel patterns connected with the past deictic enclitic in the Acalan Chontal document and the Classic Maya hieroglyphic texts first with Barbara MacLeod. We then began to collaborate on working out the details of the forms it takes in the Classic Period and how it interacts with various derivational and other suffixes in the script. We, along with several
(continued...)

Especially Robertson, considering his credentials as a linguist eminently grounded in the study of Mayan languages, would be considering approaches that justify viewing this adverb as verb morphology instead. In an unpublished paper I circulated while doing research for this dissertation, I wrote the following:

From a morphological standpoint, viewing the main events in the inscriptions as narrated in the incompletive aspect ("historical present") would cause a radical shift in interpretation. One must conclude, for example, that the Ch'orti' passive incompletive in *-hC-a* was the form reflected in the Classic-Period writing system although Ch'olti', an earlier eastern relative of Ch'orti', takes instead an *-el* and *-al* suffix in the incompletive. Even more problematic is the presence of a passive *-hC-a* in the completive aspect in Ch'olti', but not in the incompletive. If there were a direct line from the language reflected in the Classic Period writing system through Ch'olti' to Ch'orti', one would have to assume that this same status marker switched from incompletive in classic times, to completive in colonial times and then back to incompletive for Ch'orti' (Wald n.d. [1998]).

This was and is still a problem created by Houston, Robertson, and Stuart's viewpoint that the unmarked form of many morphological suffixes in the Classic texts were actually incompletive while those same forms turned out to be completive in the Colonial and modern languages. This problem would only be exacerbated if one insisted that Ch'olti' was the same language as Ch'orti' but about 250 to 300 years earlier, that is, that "Morán's" Ch'olti' documented from 1625 and 1695, was the direct ancestor to the Ch'orti' of 1930 and later (see Fought 1972:5;1984:43). That Ch'olti' is the same

³²⁴(...continued)
others including Alfonso Lacadena, David Stuart, and Karl Taube were invited to Provo, Utah by Steve Houston and John Robertson to discuss these differing views in December of 1997. A much shorter revised version of that paper (Wald 1998a) was presented at the SAA Meetings in March of 1998. The first version summarizing some of the results of this dissertation research that I distributed beyond the participants at that conference was completed in November of 1998. It has also not been published. A revised, slightly-expanded version of the 1998 SAA presentation was published two years later (Wald 2000a).

language as Ch’orti’, but just as it existed at an earlier date, has been asserted several times by Robertson (1992:169; 1998; Houston et al. 2000a:334). Eventually it would become critical for them to provide an explanation for this and other seemingly difficult progression sequences from Classic Mayan (later dubbed by them “Classic Ch’olti’an”) through Ch’olti’ to Ch’orti’. This would finally come in an article published in 2004 although there were intermediate steps along the way.

7.1.6.1 Incompletive and Completive in “The Language of the Classic Maya Inscriptions”

Next I will provide a brief overview of Houston et al.’s comments in other earlier venues on the question of the incompletive and completive aspect in the Classic texts along with their views concerning my alternative enclitic-based proposal for the morphemes in question. In June of 2000, an article written by Houston, Robertson, and Stuart and entitled “The Language of the Classic Maya Inscriptions” (Houston et al. 2000a) appeared in *Current Anthropology*.³²⁵ Although it dealt with a wide variety of morphological affixes in the Classic-Period inscriptions, it mentioned only in passing either incompletive or completive aspect inflection or the adverbial deictic enclitic *-i:iy* ∞ *-iiy*. When doing so, Houston et al. (2000a:325) remained quite noncommittal concerning the morpheme in question:

More recently Wald (1998[b]), in collaboration with MacLeod, has developed a nuanced study of the ubiquitous suffix *-i:y*, earlier identified as the completive (or perfective) aspect on verbs in Ch’olan languages (Stuart 1987:48) and serving

³²⁵The content of the article itself was somewhat older, as is usual. It was submitted for publication in July of 1999. A much shorter version of it had been given at the same 1998 SAA meeting workshop at which I (Wald 1998a) presented an earlier version of the article “Marking Time in Classic Maya Narrative” that was also published in the same year (Wald 2000a).

perhaps also as a deictic particle in varied contexts (this suggestion is now under active discussion. (Stuart et al. 1999[a])³²⁶

Also, in other parts of the article, they continue to leave the question open as to whether the *-i:y* suffix marks verbs “aspectually or deictically” (Houston et al. (2000a:329, 337) and note that “Substantively, there remains disagreement about aspectual morphemes and discourse patterns in script [sic] (Houston 1997, Wald 1998[b]).” In other words, at least in print at that point, they seemed reluctant to resolve the issue as to whether Houston’s or my proposal for this morpheme was the correct one.

7.1.6.2 Temporal Enclitic or Completive Inflection: “The XXIII Maya Hieroglyphic Forum at Texas”

After I prepared a four-page illustrated summary of the approach and gave a joint presentation with Barbara MacLeod (Wald and MacLeod 1999[b]) at the 1999 Texas Maya Meetings Hieroglyphic Forum, John Robertson made several comments that seem useful for understanding the progression of our discussion concerning aspectual morphemes and adverbial enclitics just alluded to in the quotes above.

Now one of the things that really bothered me about Bob’s and Barb’s analysis is that it was very sophisticated linguistically. I really believe it. I believe that the analysis is absolutely dead on. I think that it is right. . . . These two suffixes essentially mean the same thing whether they are attached to verbs or adverbs and they can be hooked on to a lot of different things as well. . . . So what does this suffix do? It tends to move the action back in time. We agree with Bob’s interpretation. (Stuart et al. 1999b:114)

³²⁶The latter publication is referred to as Stuart et al.1999a in the References Section of this dissertation.

Taken as a loose, off-the-cuff appraisal, there does seem to be rough agreement on what the enclitic *-ijiiy* ∞ *-iiy* does. However, already the description “tends to move the action back in time” hints at a different viewpoint. The description “moves the action back in time” is much more appropriate to English past tense morphemes and forms. It does not accurately represent how this enclitic actually functions in context as attested in the detailed examples presented earlier in this study. As we shall see later, reconstructing a tense system instead of an aspect system does seem to be the direction in which Robertson was heading, although only the incompletive and completive aspects were mentioned in the proceedings of the Forum (Stuart et al. 1999b). Nevertheless, despite the probable complete absence of tense inflection from any previous proto-language reconstructions among the Mayan language families, such a tendency was, at least in hindsight, already noticeable in Robertson’s approach.

What seems, from the paragraph just quoted, to be almost complete agreement with the interpretation I presented orally at the Forum (Wald and MacLeod 1999b:78-91), turns out, however, to be only partial. What Robertson is really saying is that *-ijiiy* ∞ *-iiy* existed as an enclitic not in the Classic-Period texts but rather in pre-script times. Thus, for Robertson, *-ijiiy* ∞ *-iiy* “is some sort of anteriorizer that moves the verb back in time. What I [Robertson] am saying is that it happened at a stage just before the emergence of Classic Mayan” (Stuart et al. 1999b:114). But, for him, this was not the case in the

	pre-Cl Mayan Completive	SCRIPT Completive	Ch’olti’ Completive
Root Tr:	*erg-CVC-V ₁	erg-CVC-V ₁	erg-CVC-V ₁
Derived Tr	*erg-CVCV-Ø	erg-CVCV	erg-CVCV
SAP:	*SAP -i abs *SAP i:y abs (rare*SAP ihi:y)	SAP -i:y abs (rare*SAP ihi:y)	SAP -(i) abs

(Adapted from Stuart et al. (1999b:114))

Figure 295. John Robertson’s 1999 reconstruction of completive aspect for “Pre-Classic,” “Script,” and Ch’olti’.

Classic texts. Figure 295 shows the way Robertson illustrated this reconstruction at the time for the completive.

Because this represents a stage between the earlier incomplete-completive aspect analysis presented in Houston (1997) and the later formulation of a present-past “tense” theory in Robertson et al. (2004), only a few comments will be made here. First, Robertson illustrates both *-i* and *-i:y* as if they were morphological suffixes or status markers in the pre-script language. I think the evidence points instead to an *-i* status marker for root intransitives regardless of aspect and an *-i:y* adverbial enclitic independent of either aspect or tense. Some arguments for this view have already been presented in this study and more will follow later.

Second, at this time, Robertson is still calling the system aspectual as indicated in his diagram labels of “completive” and “incomplete.” Thus although he is agreeing that *-ijiiy* ∞ *-iiy* has to do with temporal relationships instead of aspectual relationships, he still designates the supposed morphological suffixes that indicate these relationships “aspect markers.” He also still describes the function of this supposed Classic-Period completive aspect in terms of tense despite the labels “incomplete” and “completive” used in his description: “It tends to move the action back in time.” Surely this stance would become untenable over time, given the normally accepted definitions of “incomplete” and “completive” aspect and accepted characterizations of how they function in general and in the Ch’olan languages in particular as documented in his own writings (cf. Robertson 1992:64).

It is interesting to note here that, at this time as indicated in Figure 295 “(rare*SAP *ihii:y*),” Robertson was still willing to allow for the possibility, albeit “rare,” of *-ijiiy* (his *ihii:y*) occurring on an intransitive verb. Later he no longer accepts the validity of its existence as indicated in Robertson et al. (2004). However, already at this earlier time he rules out completely its existence at all on transitive verbs, even derived transitive verbs, despite the large number of attested occurrences of derived transitives with the *-iiy* form of the enclitic, and even several with the *-ijiiy* form, in the Classic-

Period texts (cf. Sections 6.5.1.2 and 6.5.9.2.2 above). This may be partly due to Houston, Robertson, and Stuart's own correct insight that root transitives are not distinguished by morphological suffixes for either incompletive or completive aspect in Ch'olti' or Ch'orti' and, from my perspective, their correct application of that insight to the Classic-Period texts. However, they fail to take into account the Ch'olti' *-n* incompletive (Robertson's "future") suffix for several derived transitive forms. Even in Robertson's analysis they would be the closest equivalent to the transitive incompletive form in Ch'olti'. This oversight may also be partly due to his admittedly single-minded search for a **Single Argument Predicate (SAP)** completive marker at least for all intransitives: "I just can't believe that you would have all of that data and not have SAP's that show the distinction between completive and incompletive" (Stuart et al. 1999b:117).

In sum, Robertson agreed with my analysis of how the enclitic *-ihi* ∞ *-i* functions in the Acalan Chontal document. He also went further by stating that "we [Robertson, Houston, and Stuart] believe that this is exactly like Acalan in pre-Classic Mayan." So according to Robertson, they have accepted my new proposal concerning how this particular enclitic functions and indeed have adapted their former analysis to include it. However, this agreement is amended by a twist or turn of events, as Robertson goes on to clarify:

However, we think that because of this **great shift**, (the **change of the incompletive marker into a future marker**) that **all of a sudden this became a completive aspect marker**. And so what we have in the script really is a completive aspectual marker (Stuart et al. 1999b:117, emphasis added).

So instead of agreeing with my analysis of how the enclitic functions in the Classic-Period texts, they instead allow that same interpretation only for a **Pre-Classic-Period-Script** stage and for Colonial Acalan Chontal. They contend that, in the Classic Ch'olan inscriptions, this enclitic has "all of a sudden become a completive aspect

marker” for “single argument predicates,” that is, for intransitive verbs. Robertson continues:

To me **this answers all of the questions**. It resolves everything that I ever wondered because first of all, I really believe what Bob and Barb said. Secondly, I really do not think that there is evidence in the script for split-ergativity because **Bob and Barb’s position would make it so that the only thing that we would ever see in the script is the completive with this -i on it, in order to refer back**, and I am talking about SAP’s. There is absolutely nothing [marking completive SAP’s] in the script [in their view] and **I just can’t believe that you would have all of that data and not have SAP’s that show the distinction between completive and incompletive**. (Stuart et al. 1999b:117; emphasis added)

This is precisely the point at which the matter was left early in 1999. Robertson et al. were still analyzing the enclitic *-ijiiy* ∞ *-iiy* as completive inflection in the Classic texts although they now acknowledged that its origins did indeed lay in the Proto-Mayan *-*ej-eer* enclitic as I had originally proposed in 1997.³²⁷

7.1.6.3 Change from Aspect to Tense: Reply to Comments in Current Anthropology

It soon became clear that one could not legitimately call the enclitic *-ijiiy* ∞ *-iiy* a completive aspect marker and still define it in terms of temporal relationships between events. However, the problems that came from equating the incompletive with the English “historical present,” which Robertson et al. (2004) later came to call the “factual present,” also presented a problem, especially in terms of Robertson’s (1992:64) own

³²⁷Robertson had already broached the subject of Proto-Mayan incompletive morphology at this conference and even much earlier in his *History of Tense/Aspect/Mood/Voice in the Mayan Verbal Complex* (Robertson 1992). Discussion of this portion of his analysis is being postponed until later along with the latest formulation in the 2004 Robertson et al. article in Section 7.1.7.

stark warning about assuming that the English present could adequately translate the incomplete:

The difference between the Mayan incomplete and the English present tense is, again, an aspectual vs. a temporal distinction, and therefore, the above English translation is injurious to the understanding of the real meaning of the Mayan incomplete.³²⁸

Robertson is here referring to translating “the Kaqchikel expression *ni-kam ri winaq* (INC-die the people)” as “people die.” Instead he goes on to state:

A more complete appreciation of the meaning would be ‘people habitually (by nature) die’: ‘were dying,’ or ‘are [dying]’, or ‘will be dying,’ where temporality (TENSE) is factored out. Any textual inspection of any Mayan language shows that the INCOMPLETE describes the action not temporally, but as ongoing and habitual, regardless of whether the action is past, present, or future – hence the aspectual name INCOMPLETE (Robertson 1992:64-65).

Perhaps this problem, among other factors, led Houston, Robertson, and Stuart to espouse an even more drastic interpretation of tense and aspect in the Classic Period inscriptions. Already in their “Reply” to the “Comments” on the Current Anthropology article, Houston et al. (2000b:349) make the direction in which they are headed quite clear.

Again, while indirectly pertinent to the arguments of this paper, Storniolo’s citation of Wald’s (2000a) as-yet-unpublished study opens an interesting and controversial question relating to the issue of split-ergativity. We now believe that Common Mayan had aspectual morphemes (**k*[V]-incomplete and *Ø*-

³²⁸This book of Robertson’s is one of the first I had ever read on Mayan linguistics and I remember taking this warning seriously.

completive) that were prefixed to the verb and tense morphemes (-Ø present and *-i:y past) that were suffixed to adverbs of time. We further believe that the morphology of tense displaced the morphemes of aspect. Therefore, Classic Ch'olti'an verbs were inflected for tense and not aspect, indicating that, in the script, the present was unmarked and the deictic past marked.

With this step, Robertson could be true to his earlier correct analysis of Mayan incomplete and completive aspect and still adopt the “historical present” interpretation, now renamed the “factual present,” proposed by Houston in 1997 as part of “the shifting now.” Robertson et al. (2004) provide further details of this new interpretation in an article also written to refute views that they attributed to me based upon an earlier unpublished paper of mine written in 1997 and distributed to them and several others at a conference in Provo, Utah. I will first try to summarize the most salient points they are addressing in their latest publication on the topic of tense and aspect in the Classic-Period inscriptions. In conjunction with this presentation, I will also provide my assessment of their analysis along with an explanation of why I agree or disagree with specific aspects of their approach. As part of this explanation, I will also attempt to address some of the criticisms they made concerning their understanding of my views at the time that the just-mentioned unpublished first draft was presented to them.³²⁹ Note, however, that not all of the issues they raise in the article will be addressed here, only those that have a direct bearing upon the understanding and credibility of their approach concerning aspect and tense in the Classic texts. Some of the other issues, especially those concerning their view of tense and aspect in both their reconstructed Common languages and in certain Colonial languages will be addressed in a later section.

³²⁹This first draft is no longer available. However, a later, also unpublished, paper dealing with some of the same topics was handed out to a much larger audience and can be reproduced. Of course, some of it no longer represents my current views on the topic.

7.1.7 Proposed “Discovery” of Tense Inflection in Classic Script

At the risk of both repeating some of the history already presented and also greatly oversimplifying the historical progression of the discussion concerning tense and aspect in the Classic texts, a very brief review of the main issues from a slightly different perspective may be helpful. Because the prefixes expected to provide tense or aspect were not found by the early 1980s, the attention turned instead to suffixes indicating incompletive or completive aspect as exemplified best in the Ch’olan and Yucatekan languages. After all or almost all of the likely examples of the expected incompletive aspectual suffixes, even those seemingly reflecting split ergativity, were rejected mainly because of advances in decipherment, a new approach was suggested by Houston who also mentioned extensive collaboration with Robertson and Stuart. It was published in 1997 but had been conceived somewhat earlier and parts of it were based initially upon some observations and insights made by Stuart as early as 1987. In Houston’s view, what was formerly called the anterior event indicator on verbs was interpreted as a completive suffix. What had been interpreted as various types of completive forms or suffixes on verbs, were now reinterpreted as incompletive forms and given the meaning of “historical incompletives” patterned after the English “historical present.” After abandoning the attempt to justify Houston’s interpreting of the incompletive aspect in the Classic Period texts, I suggested a different interpretation of what Houston, Robertson, and Stuart identified as a morphological completive suffix. Finding parallel patterns on verbs in the Acalan Chontal document, I identified this supposed morphological suffix on verbs as instead an adverbial enclitic. I proposed that it was a reflex of an enclitic that appeared and still appears in several forms on numbers and time-period nouns and adjectives not only in both sets of texts, but also in all the Ch’olan languages and even has reflexes in most of the Mayan languages (cf. Wald 1998a, 1998b, 2000a, 2004b). Robertson (Stuart et al. 1999b) accepted the proposal that this morpheme originated as a temporal enclitic but argued further that it had become a morphological completive suffix by script times. For various reasons including the incongruity of a completive suffix functioning in a

purely temporal capacity, Houston et al. (2000b) and Robertson et al. (2004) eventually proposed instead that it was actually a past-tense suffix in a tense-based system. It is this proposal that will be reviewed and evaluated next.

7.1.7.1 Proposed Common Mayan “Inflectional Aspect” and “Adverbial Tense”

One of the main problems with proposing that Classic Ch’olan (their Classic “Ch’olti’an”) has a tense-based verb system is that, to the extent that there is evidence of tense morphology among Mayan languages at all, comparative analysis points to its being a rather recent development.³³⁰ For that reason, the proposal of a well-developed grammaticalized tense system in a language as old as that of the Classic-Period Maya must attempt to provide a satisfactory explanation as to how something that unexpected could occur. As stated by Robertson et al. (2004:259) in their own list of criteria “the proposal must account for linguistic ancestors and descendants.”

The difficulty of explaining the origin of tense in Classic Ch’olan would become even more complicated if one had to explain not only how a morphological verbal tense system could grow out of a morphological aspect system, but also how that morphological tense system would then change back again into a morphological aspect system. This challenge was exactly the one faced by Robertson et al. when they changed their classification of the morphological verbal system of Classic-Period Ch’olan from one based upon incomplete-completive aspect to one based upon present-past tense. That is because, already in 1992, Robertson reconstructed an incomplete-completive aspectual system for Common Mayan.³³¹ Robertson (1992:66) stated “that in Common Mayan the form for the COMPLETIVE was literally unmarked, *Ø, while the form for the

³³⁰ See Section 9.2 for a more detailed discussion of tense and aspect in the Ch’olan languages.

³³¹ I have not been able to find a substantial difference between the use “common language” by Robertson and “proto-language” by some others. The definition of “proto-language” by Crystal (1992:318) as “The common ancestor of the languages of a family” seems to allow for equating the use of the two terms as well. So at least for the purposes of this discussion, terms such as “Common Mayan” and “Proto-Mayan” will be considered roughly synonymous.

INCOMPLETIVE was **k(i)-* for all persons but 1PL, where it was **q-*.” Except for now proposing an incompleted in **ka-* instead, his reconstruction in 2004 remains the same. While I do not agree with his reconstruction of a morphological aspectual system for Common Mayan, it is a hurdle which, having set it up, he has to overcome.

At the same time, Robertson et al. (2004:263) also propose this concerning tense in Common Mayan: “Tense, however, is not directly a verbal category per se, since temporal marking was strictly adverbial.” I, of course, agree with the main thrust of this part of their proposal since it mirrors precisely what I had previously proposed for Classic Ch’olan and with which they agreed in principle, albeit not for the Classic-Period texts.

They have applied it instead only to Common Mayan and excluded it from “Classic Ch’olti’an” as Robertson already stated in the 1999 *Proceedings of the Maya Hieroglyphic Workshop* passages quoted above (Stuart et al. 1999b).³³² Robertson et al. summarize this part of their proposal in the outline shown here as Figure 296.

Despite their use of the word “tense” regarding **eer* in their outline, it should be noted that, as they themselves state, they are really referring to an adverb and **not** to tense per se. The same applies

ASPECT INFLECTIONAL	TENSE ADVERBIAL
COMPLETIVE specific nondeictic <i>*Ø</i>	PAST specific deictic <i>*-eer</i>
INCOMPLETIVE non specific nondeictic <i>*ka-</i>	NONPAST nonspecific deictic <i>*Ø</i>

System for Common Mayan
from Robertson et al. (2004:Fig.10.4)

Figure 296. Robertson et al.’s (2004) proposal for aspect and tense systems in Common Mayan

³³²I do find it very problematic that Robertson et al. use the term “tense” to refer to the use of non-grammaticalized adverbs as temporal indicators, but that issue will be dealt with separately later. I will address the use of related terminology and the concepts involved in the discussion of tense, temporal marking, and grammaticalization in Section 7.2. There does not seem to be enough similarity of usage among the known Mayan languages to reconstruct either grammaticalized present-past tense or incompleted-completive aspect morphemes or constructions for Proto-Mayan. The evidence points instead to the existence of lexemes that were recruited much later to form tense and aspect (other than resultative) under the influence of an occupying force that spoke an entirely different language. Internal evidence of this for a few of the relevant languages this will be discussed later in Sections 9.2.8 and 9.2.9 although detailed evidence from other Mayan languages will not be presented in this study.

to the use of the words “past” and “non-past” in the same table. The specific enclitic they refer to in this context is indeed meant to be an adverb and **not** a morphological suffix, grammaticalized auxiliary, or syntactic tense. Although there is clearly no problem in labeling these enclitics as “past” and “nonpast,” the addition of the term “tense” automatically takes these enclitics out of the category of “adverb” and puts them under the classification of tense inflection. Also, although I too have used the term “past,” but not “tense” in referring to their function in context, it should be kept in mind that the term “past” in connection with the temporal enclitic *-ijiiy* ∞ *iiy* only fits in certain contexts and also that this “past” may at times refer only to a position in the narrative and not to the past in any extra-textual temporal sense. It certainly does not refer to “tense” which is strictly a verbal category. In any case, it should be kept in mind that this particular enclitic is really an adverb with a range of meaning including, but not limited to, “earlier, ago, back then, before now, in-the-past.”

Common Ch’olan	<i>*hul-i</i> ‘it arrived’ completive	<i>*x-hul-i</i> ‘it arrives’ incompletive	<i>*el-hul-i</i> ‘it will arrive’ future	— — negative future
Classic Ch’olti’an	<i>hul-i:y</i> ‘it arrived’ past	<i>hul-i</i> ‘it arrives’ present	<i>*x-hul-ik</i> ‘it will arrive’ future	<i>*el-hul-i</i> ‘it will not arrive’ negative future

Adapted from Robertson et al. (2004:Fig.10.6)

Figure 297. Robertson et al.’s (2004:270) transition from Common Ch’olan aspectual system to Classic Ch’olti’an tense system

7.1.7.2 From “Inflectional Aspect” to “Inflectional Tense”: Unattested **x-Future*

The next step or task they have set for themselves is to get from this reconstructed system of “inflectional aspect” and “adverbial tense” in “Common Mayan” all the way to one in which there is no longer any inflectional aspect marking but rather only inflectional tense marking in the Classic-Period texts. Part of this process, from their

reconstructed Common Ch'olan to their Classic Ch'olti'an, outlined in Figure 297, is described by them as follows:

What is of particular interest is the wholesale, systematic way that **-iiy* became a part of the verbal system of Classic Ch'olti'an. Not only did **-iiy* invade the verbal system as a deictic, to become an inflectional marker of past tense, but its unmarked counterpart, **Ø*, came to mark the present tense. By analogical process, the new present-tense marker, the old inceptive marker *x-*, was bumped to the future tense, and the old future marker became a negative future, (Robertson et al. 2004:269)

They also note that in Proto-Mayan the completive was unmarked because Proto-Mayan had an aspectual verbal system. Likewise, Robertson et al. (2004:269) state, "The reason that the present has its unmarked role in Classic Ch'olti'an comes from the fact that . . . the present tense is the unmarked tense and the completive aspect is the unmarked aspect." That this could happen at all typologically is, according to them, attested by the Lulubo language of the Central Sudan area.

More to the point, when Lulubo shifted from aspect to tense, the discourse pattern "flipped:" The unmarked present assumed the discourse function of the old completive, and the marked past took on the discourse function of the old inceptive. Classic Ch'olti', as evidenced in the script, did the same thing: the newly minted present (*Ø*) assumed the discourse function of the old completive (**Ø*), and the new past (*-iiy*) took on the function of the prior inceptive (**x-*), which subsequently became a future, as attested in Ch'olti' (Robertson et al. 2004:267).

In sum, they argue that the progression from a verbal system based upon incomplete and complete aspect with the complete as the unmarked aspect could be “flipped” so that it would become a present and past tense system with the unmarked complete forms becoming the unmarked present forms. An adverb, *-eer*, now *-iiy* at some point post Wasteko-Ch’olan, would be grammaticalized as a past-tense suffix and the unmarked complete would become the present tense by default. Considered from a purely theoretical standpoint, one might not want to rule out that this could happen. But there are unmistakable signs of problems already at this stage. Robertson et al. reconstruct a Common Mayan incomplete prefix in **ka-* and then also reconstruct a reflex of it as an incomplete **x-* prefix in Common Ch’olan. What is more, they also reconstruct an **el-* future prefix for Common Ch’olan. They then posit that this **x-* incomplete prefix became a future prefix in “Classic Ch’olti’an,” their name for the language of the Classic-Period texts, while at the same time the **el-* prefix became a negative future. As proof of the existence of the **x-* future in the Classic texts, Robertson et al. note that “The *x-* future is well attested in Ch’olti’.” To support the relationship of this future form to the incomplete in Common Mayan and Common Ch’olan, Robertson et al. (2004:270) note other evidence that “*x-* future in Ch’olti’ was historically an incomplete.” The evidence they provide is as follows:

First, it is an incomplete in Tzeltalan (Figure 10.5; Robertson 1992: 186). Second, derived transitives take an *-n* suffix in the incomplete in the Ch’olan languages (Kaufman and Norman 1984: 93) The same *-n* shows up in the Ch’olti’ future of derived transitives: *inuila misa* [inw-ila misa] erg1sg-see-mass, ‘I saw/see mass’; *xinuilan misa* [x-inw-ila-n misa] future-1ergsg-see-future mass, ‘I will see mass’. Third, the motivation for the movement of the *x-* incomplete to the future is reasonably given by the shift from aspect to tense: **Ø* present displaces the **x-* incomplete, and the **-iiy* past displaces the *Ø* complete.

With all this purported “evidence” for the existence of the *x- future in “Classic Ch’olti’an,” one may just miss the most important and telling statement of all, that is, that the *x- future “**has not been attested in the script**” (Robertson et al. 2004:270, emphasis added). This is also the time to take another look at Figure 297. Of course, the earlier Common Mayan forms were **reconstructed** as are the Common Ch’olan forms here in their Figure 10.6. That is, after all, the nature of Common or Proto-Languages. They are reconstructed based upon comparative linguistics and other related arguments. However, here Robertson et al. also reconstruct *x- as being a future tense marker, as in *x-hul-ik, and *el- as being a negative future marker, as in *el-hul-i, both for “Classic Ch’olti’an.” But the asterisks in front of the “Classic Ch’olti’an” forms of the futures in *x- and *el- indicate that they are also admittedly **reconstructions**. They cannot bring even one actual example of either this positive or this negative future in “Classic Ch’olti’an,” which is, after all, the actually written and attested language that is the object of study. These forms are instead reconstructed simply because Robertson et al.’s other reconstructions of Common Mayan and Common Ch’olan plus their interpretations of Colonial and Modern languages require them to be there. This is acceptable for linguistic reconstructions, but it hardly seems acceptable for an actual written language whose texts are the current focus of analysis. It is even less acceptable when that very reconstruction is then recruited to play a central role in the motivation for diachronic language changes.

In this whole article, Robertson et al. have not progressed beyond what Robertson offered in 1999 as a reason for this anomaly of the non-existence of what they need as evidence for their theory. This was, according to Robertson, that “**Unfortunately for rhetorical reasons**, we have not seen these future markers (the Future and Negative Future markers in the Script)” (Stuart et al. 1999b:115, emphasis added). Is this not precisely one of the main criticisms they had of those who argued in the past that the incompletive forms were not present because the main narrative timeline of the historical genre would tend toward completives instead of incompletives (cf. Wald 1998b)? Yet

they seem not to be daunted by the absence of both of their reconstructed futures in the Classic Texts.

The case of their proposed future tense morpheme and its absence in the Classic texts is especially significant since there are indeed many contexts in which such a future tense morpheme could and would be used if it did indeed exist at all. Some of these very contexts have already been presented earlier in this study in Section 5.2.2. Instead of their proposed future tense morpheme, one finds instead either the *-ij* adverbial enclitic or no enclitic at all on the time-period nouns to indicate a “forward-toward” time progression. The verbs in such sentences are often, but not always, inflected by a resultative suffix stressing that a certain state will result. Never does one find an **x-* prefixed to the verb in these contexts.

7.1.7.3 Some Alternate Explanations for Ch’olti’ **x-* Future or Subjunctive

The *x-* “future” morpheme is attested in Colonial Ch’olti’ as a type of future or, more likely, an optative, hortative or subjunctive (see Sattler 2004:368-382), but it never occurs in Classic Ch’olan. Ironically, if the *x-* future really existed as an incomplete marker in Common Mayan and then as an optative or subjunctive, or even future marker in Ch’olti’, but did not exist at all in Classic Ch’olan, one could theoretically use it instead as evidence, albeit sparse, against the designation of Ch’olti’an as a direct Colonial descendant of the language of the inscriptions. Otherwise, how could the same **x-* be present in reconstructed Common Mayan and in attested Colonial Ch’olti’ as verbal inflection without being attested in some form in the language that forms the link between the two. Despite the unintended evidence against such a link offered by Robertson et al., it is nevertheless quite clear that Ch’olti’ is a direct descendant as are the other Ch’olan languages.

However, if one indeed accepts Ch’olti’ as a direct descendant and the *x-* future or subjunctive inflection was not present in the parent, then one is left with only a few other choices. Among them, the most likely would be that the *x-* inflection in question was not

passed down directly from Common or Proto-Mayan. One possibility is that Ch'olti' borrowed it later from a different language. There is an *x*-incompletive actually attested in Tzotzil (cf. Haviland 1988:93) and in Tzeltal (cf. Slocum et al. 1999:296; 299-300). However, since Classic Ch'olan descended from Greater Tzeltalan and since *x*- is not attested in Classic Ch'olan (their Classic Ch'olti'an) as either incompletive or future inflection, there is no evidence that an *x*-subjunctive/future was passed down from Greater Tzeltalan through Classic Ch'olan.

Another explanation for the presence of the *x*-subjunctive or future in Ch'olti' is that it may have developed it on its own. One possible scenario is that an adverb or verb was recruited to perform a particular inflectional function based upon that morpheme's basic meaning. It may indeed have received the source lexeme from a parent but not as any particular type of verbal inflection at all. This may have taken place in other languages such as Tzotzil and Tzeltal as well. Faced with the need for such inflection, each language would have drawn upon its own adverbial and other lexical content, especially enclitics, to provide the required affixes. In such a scenario, there would be no grounds to reconstruct this morpheme as inflection for Common or Proto-Mayan at all. Instead, what one might find in the parents are independent and dependent morphemes that were later grammaticalized as verbal inflection.

Important here is to note that without any attestations of this supposed **x*-future in the Classic inscriptions, a reconstruction of it for Classic Ch'olan is meaningless. Reconstructions that cautiously map out a possible ancestral language can be a useful tool. Reconstructions that require creating unattested forms in a historical language that is well documented are of questionable value to say the least.

This is as far as the evidence provided by Robertson et al.'s reconstructions of unattested Classic Ch'olti'an future and negative-future morphological prefixes takes them. Just as Schele and others were not able to find morphological tense or aspect prefixes on verbs in the early 1980s, so too were Robertson et al. not able to find them in 2004. The analogy with Lulubo still leaves them with typological evidence from another

language indicating that a verb system could have “flipped” from a morphologically marked aspectual system to a morphologically marked tense system with an unmarked completive becoming an unmarked present. But it leaves them without any evidence of an incomplete-to-future link between their Common Mayan and Colonial Ch’olti’.

7.1.7.4 From “Inflectional Tense” Back to “Inflectional Aspect”: Unattested Progressive

The next step Robertson et al. take is to show how the hypothetical, morphologically-marked tense-system of the Classic-Period could become the morphologically marked aspectual system of Colonial Ch’olti’. Robertson et al. (2004:271) note that:

The chief grammatical difference between the grammars of Classic Ch’olti’an and Ch’olti’ is the difference between straight- and split-ergativity. Otherwise, the two languages are largely the same. In the briefest terms, Classic Ch’olti’an became seventeenth-century Ch’olti’ when the progressive aspect displaced the present tense, thus becoming the incomplete aspect; the unmarked present became the unmarked completive.

Considering that a tense system was supposedly replaced by an aspectual system, it does seem strange to suggest that the main difference between the grammar of Colonial Ch’olti’ and that of Classic Ch’olti’an was that of split ergativity versus ergativity. After all, their theory proposes that practically every form that was present tense prior to this second big “flip” now became completive. In addition, an altogether new set of incomplete forms was developed. Nevertheless, disagreement with that particular feature of Robertson et al.’s proposal is of secondary importance compared with other issues.

Returning to this progression from a verbal system with morphological tense-suffixing to a system with morphological aspectual-suffixing, Robertson et al. (2004:271) “assert, the progressive took the place of the Classic Ch’olti’an present.” According to them, the driving force behind this change and

the impetus for the shift from Classic Ch’olti’an to seventeenth century Ch’olti’ is apparently grounded in several typological processes.

First, the progressive tends to influence or even take over the incompletive (e.g., Celtic and in some Mayan languages).

Second, the progressive tends to take a locative marker.

Third, the incompletive/present tends to be correlated with the opposition nominative/accusative and completive/past with the ergative/absolutive.

Finally, syntactic systems tend to become morphological systems and not the reverse. . . . (Robertson et al. 2004:272)

Although it is possible to legitimately argue about the universality of some of these observations (cf. Hopper and Traugott 2003:130-138), such a discussion would be mainly irrelevant here. There is, to be sure, a considerable body of evidence for these tendencies among the languages of the world. But they do represent tendencies and not laws. Even more important in the present context is that they be shown relevant to the matter at hand. What Robertson et al. are attempting to justify is the progression from a morphological tense system in “Classic Ch’olti’an” to a morphological aspect system in Colonial Ch’olti’. Because they view the effect of the progressive aspect upon the whole process as absolutely critical, Robertson et al. see a need to trace it from Common Mayan, through Classic Ch’olan, and all the way up to Ch’olti’. In doing so they isolate five different stages along the way.

According to Robertson et al. (2004:276), in the first stage of its development, “the progressive was a highly developed syntactic construction, based on the nominative-

accusative axis (raising of the intransitive subject and transitive agent).” They place the existence of this stage historically in Common Mayan, but find it represented today in Kaqchikel. They characterize it in Common Mayan as a “complicated syntactic system . . . with a strictly syntactic focus” in which “the nominative/accusative opposition is restricted to the progressive” (Robertson et al.:2004:272). They continue by noting that

the progressive involves a complex syntactic construction, which includes nominative/accusative syntax, as well as a prepositional locative, both of which are typologically common (see above). Again, Kaqchikel approximates the Common Mayan structure: *y-oj-tajin chi war-am*, incomplete-abs1pl-on.going at sleep-nominalizer, ‘we are sleeping’; *y-oj-tajin ch-u-k’ayi-x-ik*, incomplete-abs1pl-on.going at-erg3sg-sell-passive- nominalizer, ‘we are selling it.’ (Robertson et al. 2004:273)

y-oj-tajin inc-abs1pl-on.going	ch- preposition	u-k’ayi-x-ik erg3sg-sell-passive-nominalizer
‘we are selling it’ lit. we.are at its.being.sold		
y-oj-b’e inc-abs1pl-go	chi- preposition	r-achoch erg3sg-house
‘we go to his house’		

Adapted from Robertson et al. (2004:Fig.10.12)

Figure 298. Kaqchikel’s “prepositional locative” form of progressive as described by Robertson et al. (2004)

Figure 298 shows more clearly the kind of parallel that exists in Kaqchikel between a verb followed by a preposition and a noun in the second example, and a verb followed by a preposition and a possessed nominalized verb in the first.³³³ Especially

³³³This Kaqchikel form and many other similar, but not necessarily identical, forms in most of the Mayan languages including the Ch’olan family are indeed extremely interesting and important, but, I think, not applicable in the way Robertson et al. uses them here by equating them with a reconstructed Common
(continued...)

interesting for other purposes later in Section 9.2, is the literal translation “we.are at its.being.sold.” The value of these examples in the present context, however, is a different matter for reasons we shall soon see.

The second stage envisioned by Robertson et al. (2004:276)

was a simplification as it moved closer to becoming a simple morphological system. Here, the progressive was a split-ergative since the nominative (intransitive subject and the transitive agent) was marked with ergative pronouns, and the accusative (transitive patient) was marked with absolutive pronouns.

Stated somewhat differently,

the nominative/accusative opposition is still restricted to the progressive, but the nominative (subject of the intransitive and the agent of the transitive) is marked with the ergative pronoun, and the accusative (object of the transitive) is marked with the absolutive. (Robertson et al. 2004:272)

The attested examples from this hypothetical stage come from Q’anjob’al as shown in these examples: “*laan in-way-i*, ongoing erg1sg-sleep-affix, ‘I am sleeping’; *laan ach-ko-maq’on-i*, ongoing abs2-erg1pl-hit ‘we are hitting you’” (Robertson et al. 2004:274). Robertson et al. continue:

In this case the transitive verb is no longer passivized, since it “owns” its own agent. The intransitives, however, are the subjects of the higher verb: ‘my-sleeping is ongoing’. Formally, the dependent clause is nominalized and possessed. (Robertson et al. 2004:275)

³³³(...continued)

Mayan form. For an alternate approach, see Section 9.2 below.

Very important for Robertson et al. is that the rest of the system still remains unaffected by this accusative construction. “The incomplete/present in these typologies nonetheless preserved Common Mayan straight-ergativity” (Robertson et al. 2004:275). It is important because this is precisely the pattern they would need for their version of the Classic-Period verbal system, if indeed the progressive had existed at that time. Still Robertson et al. (2004:275, emphasis added) have no trouble recreating it “[a]lthough **we do not have any attestation of the progressive in the hieroglyphic script.**”

Nevertheless, they

are confident that the progressive was something like *ongoing erg-intransitive (e.g., **iyuwal u-tal-el*, ongoing erg3sg-come-aff, ‘he is coming’) and ongoing erg-transitive-V1 absolutive (e.g., **iyuwal u-muk-uw et*, ongoing erg3sg-bury-transitive you, ‘he is burying you’) (Robertson et al. 2004:275).

Armed with these Classic-Period reconstructions boosted by Q’anjob’al examples, they are now ready to explain how a “Classic Ch’olti’an” tense-based, straight-ergative, morphological verb-system “flipped” back to an aspect-based, morphological verb-system with the added feature of split-ergativity as in “seventeenth-century Ch’olti’an, Ch’ol, Yukatek.” Here then, in a nutshell, is how Robertson et al. envision that the reconstructed progressive of their Classic Ch’olti’an accomplished that task:

Stage III, however, has straight-ergativity only in the completive since the progressive with its nominative-accusative axis totally took over the present, yielding a true split-ergative system. Because the syntactic aspectual incomplete took over the present, the system once again was aspectual, the incomplete being the marked and the completive being the unmarked member. When the progressive finally took over the present, a true split-ergative system emerged since the nominative (subject of intransitive and agent of transitive) was marked

with the ergative pronoun and the accusative (patient of transitive) with the absolutive. A further consequence of the progressive taking over the present is that verbal inflection moved once again to an aspectual system, where the incompletive (the old progressive) was now the marked aspect and the completive the unmarked (Robertson et al. 2004:276).

That still leaves an unanswered question. What happened to the old “past tense” forms in *-iiy*. Well, Robertson et al. (2004:276, emphasis added) “also note that the two elements – *-i* ‘single-argument predicate’ and the *-iiy* ‘past’ – **likely fell together**, yielding *-i*.” This *-i* then suffered a similar deadly fate in that

the ultimate outcome of the formal simplification of the completive, where the original *-i* (from Common Mayan **-ik*), meaning ‘verbs with one argument’, was lost from the system, either by its incorporation into the stem, or by its elimination. (Robertson et al. 2004:276)

	Progressive	Present/ Incompletive	Past/ Completive	
Classic Ch'olti'an	*iyuwal u-hul-el ^a 'he is coming'	hul-i 'he comes'	hul-iiy 'he came'	Intransi- tive
17 th Century Ch'olti'		yual upacxiel 'I return'	pacxi 'I returned'	
Classic Ch'olti'an	*iyuwal u-t'ab'-el 'he is going up'	t'ab'-[a]y-i 'he goes up'	*t'ab'-[a]y-iiy 'he went up' (see k'a'-[a]y-iiy 'it ended')	-V1y Verbs
17 th Century Ch'olti'		[yual] ut'ab'el 'he goes up'	t'ab'ay 'he went up'	
Classic Ch'olti'an	*iyuwal u-chum-tal 'he is sitting down'	chum-wan-i 'he sits down'	chum-wan-iiy 'he sat down'	Positionals
17 th Century Ch'olti'		yual ucoital 'he sits down'	coiuan 'he sat down'	
Classic Ch'olti'an	*iyuwal u-pa-[h]-s- aj-el 'it is being uncovered [shown, opened]'	pa-[h]-s-aj 'it is uncovered'	*pa-[h]-s-[a]j-iiy 'it was uncovered' (see tzu-[h]-tz-[a]j- iiy, 'it was completed')	Passives
17 th Century Ch'olti'		yual upaza[he]l 'it is uncovered'	pa[h]sa 'it was uncovered'	

^aWe would not totally dismiss the possibility that the locative progressive existed in Classic times. It is possible that the form was something like what is reported in Morán (1695): *jualen ti cazte* 'I am cutting (breaking) wood'.

Adapted from Robertson et al. (2004:Fig.10.14)

Figure 299. Chart showing how Classic-Period present-past tense system “flipped” to Colonial Ch'olti' incompletive-completive system according to Robertson et al. (2004)

7.1.7.5 Main Problem Confronting Theory of Verbal Tense in Classic Ch'olan

The preceding section contained a description of Robertson et al.'s theory of how the progressive aspect converted the present-past, tense-based Classic-Period system to a split-ergative, incompletive-completive aspect Colonial-Ch'olti' system. This theory is

partially illustrated in a chart they include in their article and which is reproduced here in Figure 299. Although there are a number of secondary issues that are worthy of discussion, and some of them will be discussed later, there is a primary issue that becomes quite obvious when viewing this table. In a real sense, it renders all of the other possible issues moot insofar as the validity of this half of Robertson et al.'s whole theory is concerned. Indeed, it is precisely the same type of issue that called into question the first half of their theory. What is more, it is the very same type of issue that caused these very authors to call an earlier more "traditional" view into question. In Figure 299 Robertson et al. reconstruct two examples of "Past/Completive" forms from "Classic Ch'olti'an:" **t'ab'-[a]y-iiy* "–*V_Ly* verbs" and **pa-[h]-s-[a]j-iiy* "Passives." These two are **useful** reconstructions because there are a number of verbs from these same classes that are indeed attested in just these forms.³³⁴

By comparison, if one turns to the first column under the heading "Progressive" and the rows labeled "Classic Ch'olti'an," **every single example** is completely reconstructed. What is more, none of these verb classes are attested in the progressive aspect in any of the Classic Period texts. In fact there are **no attestations of any progressive constructions with any verbs** at all throughout all the hieroglyphic texts including all of the monuments, murals, ceramics, and codices. What is even more, although *'i-yu-wa-la i yuwal* or *i wal* does occur rarely (Copán Stela J, Pomona Fragment), and reflexes of it are used in progressive constructions in Colonial and Modern Ch'olan languages, it is never used in a progressive construction in the Classic-Period inscriptions.

It appears then, as shown in Figure 299, that although every single one of the supposed progressive forms are unattested in Classic Ch'olan, they have been reconstructed because of a theory that requires the progressive aspect as a major part of its rationale. It needs the unattested, reconstructed progressive to explain how a hypothetical

³³⁴The reconstruction of the *[h]* in the passive forms is also justified both because of the occurrence of the *-hV-* and *-hV-a* passives in most of the Ch'olan Languages and the reticence of the script to explicitly spell the */h/* in pre-consonant position in other words for which Colonial and Modern languages include the pre-consonantal */h/*.

morphological tense system (“Classic Ch’olti’an”) could change to an actual grammaticalized morphological aspect system (Colonial Ch’olti’) after having earlier changed from a hypothetical grammaticalized morphological aspectual system (“Common Mayan”) to a hypothetical grammaticalized morphological tense system (“Classic Ch’olti’an”). There is surely a need for, and great value in, reconstructing the Proto-Mayan and Proto-Ch’olan forms. Proto- or Common languages are by definition reconstructed. Classic Ch’olan (their “Ch’olti’an”), by contrast, is not a reconstructed nor a proto-language, but is rather one that has been recorded in the hieroglyphic texts.

If Robertson et al.’s goal is to adequately describe how their hypothesized “Classic Ch’olti’an” morphological, verbal-tense system morphed into a Colonial Ch’olti’an morphological, verbal-aspect system, how could it be dependent upon the presence of a verbal construction that is not in the texts at all but has to be completely reconstructed by them. Taking a cue from Robertson et al.’s (2004:278) statement concerning the previously proposed but unfound incomplete inflection in the Classic texts, “the breadth and depth of the hieroglyphic corpus, probably in excess of 15,000 texts (including those on potsherds), make it inconceivable that the writing system would so utterly underrepresent” precisely the key verbal construction that they feel is needed to get from a morphological tense system to a morphological aspectual system. It is not simply that progressive constructions are underrepresented. Instead they just **never occur at all**. That evidence, or, more accurately, the lack of it, is alone sufficient grounds to reject their hypothesis. At best, one should simply suspend judgment, put it aside, and wait until both future constructions in *x-* or *el-* and progressive constructions using “*yuwal*” (*i wal*) or at least any progressive constructions at all are found in Classic Ch’olan.

Robertson et al.’s Lulubo analogy may have demonstrated the possibility that verb systems could have “flipped” from that of a reconstructed “Common Mayan” to a partially reconstructed Classic Ch’olti’an. But they do not provide an example of the same historically directly connected language then having “flipped” back again to a

morphological aspect system as they state happened in going from “Classic Ch’olti’an” to Colonial Ch’olti’. Although not an inconceivable process, the Lulubo analogy itself does not lead the way back unless one is willing to wait for hypothetical future changes in Lulubo by which it “flips” back to an aspectual system again. The main tool Robertson et al. use to get around that lack, is an appeal to the unwritten existence of the progressive construction in “Classic Ch’olti’an.” And the only evidence they have of its existence is their unverifiable reconstructions because no progressive constructions occur at all in the “excess of 15,000 texts” written in Classic Ch’olan.

In sum, the whole theory of Robertson et al. concerning the development to and from a morphological tense verb system in the Classic Period is based upon their non-attested reconstructions within an actually attested written language. The parôle of highly qualified, native Ch’olan speaking scribes has been abandoned in favor of the langue of twenty-first century linguists. It is not that the linguists are not qualified. It is just that the verb system they have reconstructed, based upon their analysis of Colonial and Modern Mayan languages and their histories, was not the one used by the native-Ch’olan-speaking scribes.

7.2 Tense, Taxis, and Aspect: Clarification of Terminology

Tense, taxis, and aspect as categories have already been discussed in some detail above in Section 6. That discussion included examples showing the difference between the use of morphological aspect and tense affixes on verbs in many languages including Colonial and Modern Mayan, and the use of adverbs, enclitics, dates, verbs, nouns, and context in the language of the Classic-Period texts to accomplish the same ends. That specific discussion will not be repeated here except when useful to help clarify the necessary concepts in a more general context and to compare the approach taken in this study to that taken by Robertson et al.

Since what I consider fatal problems with Robertson et al.’s theory have already been presented, a fair question might be, “Why continue to include comments from their

analysis here when reviewing the meanings of “tense,” “taxis, and “aspect?” First of all, I have to assume that they recognized the same problems I have mentioned and did not consider them fatal. In other words, they must have concluded that their reconstructed system, that is, their analytically recreated *langue* trumped the empirically attested *parole*. If so, pointing out what I consider additional problems could help to clarify further the differences between our approaches and could also provide additional reasons for preferring one view over the other. At least it should also help others to better understand the proposals I am making and to better realize what further disagreements I have with Robertson et al.’s (2004) current approach to interpreting the temporal structure of many of the Classic Ch’olan narratives. Second, clarifying my understanding of tense and taxis, or at least the way I am using those terms in this study, should become easier if I compare them to how others use and understand them. If the terminology is clarified, then it is more likely that the real differences will become more noticeable. Third, the audience for this discussion will hopefully be diverse, with people of different interests and fields of expertise who might value certain types of arguments over others. Therefore, presenting a broader picture of our views and clarifying the differences may help to guard against a premature decision that the specific argument already presented is sufficient for reaching such a conclusion.

7.2.1 Tense and Grammaticalization

Central to Comrie’s definition of “tense” is grammaticalization. In fact, lying at “[t]he basis of the discussion in” his book entitled *Tense* “is that tense is grammaticalised expression of location in time” (Comrie 1985:9). While he notes that “it seems to be the case that all human languages have ways of locating in time,” the most important parameter “is the way in which situations are located in time, in particular the relative weight assigned to the lexicon and to the grammar in establishing location in time” (Comrie 1985:7). In other words, location in time by a language can be accomplished by means of the lexicon, that is, by means of words or lexemes and not only by verbal

inflection. To the extent that lexemes or words, as such, are used to accomplish this temporal locating, whether specific or relative, tense is not involved. However, when and to the extent that lexical items develop into “grammaticalized morphemes” through “semantic, functional, grammatical, and phonological changes” they can come to be used to express tense and many other verbal categories (Bybee et al. 1994:5). These “grammatical morphemes” may take the shape of “affixes, stem changes, reduplication, auxiliaries, particles, or complex constructions” (Bybee et al. 1994:2).

Robertson et al. (2004:260, emphasis added) themselves open their discussion of tense by noting “[t]here is common consensus that **tense and aspect are verbal categories.**” Although Robertson et al. do not use the term grammaticalized here, they are indeed explicitly limiting the category “tense” to verbs. Of course, the same understanding of the term tense has been used in this study as well. Thus, if temporal location or temporal relationships are expressed in terms of morphemes or words other than verbs or if verbs are not involved at all in a particular construction, those constructions and the morphemes and words used do not represent tense. Thus, for example, if I say “she wasn’t here earlier,” or “the dog ran away two days ago” the words “earlier” and “ago” are adverbs. They do indeed express a temporal relationship or location in time but are adverbs and so do not represent grammaticalized tense morphemes but are rather lexemes. Similarly, that is also true if *-iiy* in Classic Ch’olan is an enclitic meaning “earlier, ago, back then, then” and not a verbal suffix.

Although I have no doubt that Robertson et al. understand this difference, it seems that this understanding is not always reflected in what they write about the enclitics *-ij* and *-ijiiy* \in *-iiy* even in circumstances in which they otherwise state that they consider them to be adverbs. It is possible that either this lack of clarity concerning grammaticalization has led to a looseness in their use of the category of tense, or their looseness in the use of the term “tense” has led to a lack of appreciation for the merit of evaluating a morpheme’s grammaticalization status. There are several clear examples of their application of the term “tense” to non-verbal and non-grammaticalized morphemes,

in other words, to lexemes and clitics. This type of usage belies their statement in agreement with “common consensus that tense and aspect are verbal categories.” It also clouds the distinction between a language that uses adverbs, context, and other means to express temporal location and relationships and one that instead uses tense. Of the temporal system in their reconstructed “Common Mayan,” they note that:

Tense, however, is not directly a verbal category per se, since temporal marking was strictly adverbial. Even so, adverbial temporal marking was an important part of Common Mayan verbal expression. (Robertson et al. 2004:263)

So tense in Proto-Mayan is not a verbal category. But if it is not a verbal category, then it is not tense at all if one follows not just what Comrie states about tense, but what Robertson et al. themselves state as just quoted, that is, “**tense and aspect are verbal categories**” (emphasis added). As such, adverbs would have been very important in expressing temporal location and relationships, but what does it mean that they were a part of Common Mayan verbal expression? As a category, adverbs are usually defined as a class of words that can modify verbs, adjectives, or other adverbs. But perhaps Robertson et al. mean more by saying they were “an important part of Common Mayan verbal expression.” For example, how are we to interpret this statement about the change from “Common Mayan” to “Classic Ch’olti’an:” “With these concepts in mind, an argument can be made that **the adverbial tense system** took over the **verbal aspect system**” (Robertson et al. 2004:264, emphasis added). But what adverbial tense system are they talking about? Yes, adverbs were one of the methods to show time and temporal relationships. But there was no “adverbial tense system.” That description stands as a clear contradiction in terms with how both they and Comrie define “tense” because tense systems are all verbal by definition. If one takes a look back at their Figure 9.4, shown in Figure 296 above, they again use as a column heading “Adverbial Tense” to refer to the

Common Mayan system. But only a heading such as “Adverbial – Not Tense” would be allowed by definition.

Statements such as these referring to “adverbial tense systems” are repeated several times in their article:

Rather than broadening the aspectual system, **the adverbial tense system, *Ø ‘nonpast’ and *-eey ‘past’, replaced the aspectual system** in the Ch’olan languages. (Robertson et al. 2004:269, emphasis added)

Earlier, we pointed out that Common Mayan had an **adverbial tense system: *NUMERAL-TIME.UNIT-*eer*, as**, for example, **ox-ejeer*, ‘three days ago. (Robertson et al. 2004:288, emphasis added)

Moreover, the completive aspect for intransitives is *-e-y*, which comes from the Common Mayan **adverbial past-tense marker *-*eer***. (Robertson et al. 2004:260, emphasis added)

These and other similar passages indicate that Robertson et al. do not clearly distinguish between adverbs used to express time and temporal relationships, on the one hand, and tense which consists of “grammaticalized expression of location in time,” on the other. For over six years, I have analyzed Classic Ch’olan as using adverbs, dates, context, and other means **instead of** grammaticalized tense or aspect to express temporal location and temporal relationships. By calling such a system, as they have since come to accept for Proto-Mayan, an “adverbial tense system” makes it seem that one is simply dealing with two different types of tense systems. However, an “adverbial tense system” is, in a real sense, a true oxymoron. Classifying tense systems in this way seems to reduce our differences in interpreting the Classic Maya narratives to one of pure terminology, but instead, the difference is real. Tense systems employing

grammaticalized expression of location in time are not the same as systems with no tense but with other ways of expressing temporal location and relationships between events. Indeed, that difference in analysis is what originally lead to our mutual discussions in the first place.

Looking at the other side of the same coin, just because adverbs have the capability of being grammaticalized to form tense, that in no way makes the result an adverbial tense system. For example, being an adverb, even if an enclitic, and being a morphological affix are quite different in terms of category, description, and function. The adverb or adverbial enclitic ceases to be an adverb as soon as it is grammaticalized beyond the stage of an being an adverb, a clitic, or an adverbial enclitic. It may even be used elsewhere in the language as an adverb at the same historical horizon, but in the contexts in which it is used as tense, it is no longer an adverb. It no longer functions as an adverb and no longer fits the accepted definition. The function and meaning in context of adverbs and tense morphemes are a matter of existential synchronic reality and analysis. The historical source of a tense morpheme is a matter of diachronic history and analysis and not current synchronic reality. The tense system can function perfectly well and be used by speakers and writers even if they are completely unaware of how the specific morphemes might have developed over time.

Returning to an example mentioned earlier may bring further clarity. The example involves auxiliaries and verbs instead of adverbs and verbs, but the principle is the same. One does not need to be aware that both the auxiliary and the verb have the same lexical source or etymology to understand and correctly use the English sentence “I’m gonna go home tomorrow” as a type of future tense or modal construction. In the last example above, Robertson et al. call **-eer* an “adverbial past-tense marker” in “Common Mayan.” I contend that it cannot be both adverbial and a past-tense marker at the same time in the same specific instance just as “gonna” cannot be the lexical and semantic equivalent of the verb “to go” and an auxiliary forming a future construction in the same instance. That is why one must also use the actual lexical verb “to go” in the

example “I’m gonna go home tomorrow” to express what one means. Saying instead ≠“I’m gonna home tomorrow” or even ≠“I’m going to home tomorrow” would not make sense in current English, or at a minimum, would have a quite different meaning. In the same way, **eer* with the adverbial meaning “earlier, ago, in the past, back then” can be used as an adverb to refer to time and temporal relationships. But if it were a morpheme expressing past tense in a particular instance, it would no longer be an adverb. Furthermore, as long as it is being used as an adverb in a particular instance, it cannot be past tense.

An unwelcome alternative might be to broaden the meaning of “tense” to encompass both grammaticalized and ungrammaticalized time and temporal relationships. But that would mean that a real distinction between lexemes such as adverbs, on the one hand, and morphological tense affixes, tense auxiliaries, and syntactic tense, on the other hand, would be lost. The result would be that an important area of linguistic analysis would also be lost and solid insights into how languages work would cease to be available.

7.2.2 Grammaticalization Process

In general, “grammaticalization” refers to the process by which “grammatical morphemes develop gradually out of lexical morphemes or combinations of lexical morphemes with lexical or grammatical morphemes” (Bybee et al 1994:4).³³⁵ Stated slightly differently but with the same basic meaning, “grammaticalization” is “a term referring to the change whereby lexical items and constructions come in certain linguistic contexts to serve grammatical functions and, once grammaticalized, continue to develop new grammatical functions” (Hopper and Traugott 2003:231). In many cases it is easy to spot a grammaticalized morpheme, for example, morphological suffixes such as the English past tense suffix *-ed* in “I wanted” or the Classic Ch’olan root transitive marker *-V₁w*. What is more, with suffixes such as these, it is not at all obvious what their original

³³⁵Bybee et al. (1994:4) actually use the term “grammaticization” instead although they do not intend to refer to a different process or theory.

underlying lexical forms might have been. In some cases even expert linguists in the particular language might not always agree. At the other end of the spectrum are content words such as English “dog” or Ch’olan *tz’i’*. In between these extremes are many gradations from pure content to pure function. Also, morphemes derived from one original may actually be in use at various levels in the same language. The oft repeated example of “gonna ∞ going to” as future versus “going to” as a physically directional verb and preposition combination is a good example of that occurring. Of course, these may often not even be limited to individual words as already noted in the definitions of grammaticalization that have been provided here.

There are certain changes that lexemes and morphemes undergo as they proceed from content words to grammatical forms. Not all lexemes undergo all or even any of these changes. Nor do any of these changes alone necessarily make them grammatical forms. Instead, there are many different classes of words needed to fill the spaces along the way. As Hopper and Traugott (2003:109) note, “once an item has been reanalyzed, continued grammaticalization is not inevitable, but may be suspended indefinitely at any point.” Certain words, such as body parts, are more likely in many languages to be used concurrently at various levels. For example, in English “back” can be a simple noun referring to a part of the body. But it can also be used as a verb, adjective, adverb, and, in combination, even as a preposition as in “back of.” All these different types of morphemes serve important purposes in communication between speakers and listeners, between writers and readers. All of them are interesting in their own right for someone interested in language use and change, whether within a particular language or among languages in general.

7.2.2.1 Clines: From Lexical to Grammatical

The “‘pathway’ along which forms evolve [diachronically is called a] ‘cline’ Synchronically a cline can be thought of as a ‘continuum’: an arrangement of forms [from] ‘lexical’ [to] ‘grammatical’.” (Hopper and Traugott 2003:6). In moving along

this cline, one can “recognize the same diachronic processes at work in a long chain of developments” that include “semantic, functional, grammatical, and phonological changes” (Bybee et al. 1994:5). Reviewing some of them briefly will provide an idea of just what these changes can involve.

“One type of semantic change . . . is semantic generalization” (Bybee et al 1994:6). As a result of this type change, a form such as a lexeme or construction can be used in a wider variety of contexts. Thus in English “back,” which as a body part had a limited meaning, came to be used in any context when referring to a location far away or out of one’s sight. From locational contexts it expanded to temporal contexts indicating time in the past. It is still in a way connected to a part of the body but its figurative meaning is not limited to it.

This same process can also be called “semantic reduction” since “certain components of meaning are lost in this process” (Bybee et al 1994:6). Other terms used for this process are “bleaching” and “erosion” precisely because certain parts of the meaning are lost. Thus the same development can be looked at as both a loss or weakening of meaning and also an enrichment. Hopper and Traugott (2003:94) provide this quote from Sweetser which makes this seeming contradiction understandable based upon the “development of future *go*”:

we lose the sense of physical motion (together with all its likely background inferences). We gain, however, a new meaning of future prediction or intention – together with *its* likely background inferences.” (Sweetser 1988:392)

Often, this process is accompanied by “phonological reduction.” This is not noticeable at all in the “back” example but it is quite obvious in the “gonna” one, which has already been mentioned several times. As noted by Bybee et al. (1994:6), some or all of these might occur, “loss of stress or independent tone . . . loss of segmental material and a reduction in the length of the gram,” that is, the **grammatical** morpheme. When

used as a future grammatical morpheme, “gonna,” as such, cannot, synchronically speaking, be segmented or broken into its former parts and is shorter to articulate. Grammatical morphemes may continue to “fuse with other grammatical or lexical morphemes” and “may lead to phonological changes in the gram.” Eventually even the “lexical material to which it attaches “ may be “susceptible to phonological variation, which eventually becomes morphophonemic” (Bybee et al. 1994:7).

A very good, as well as quite relevant, example for the present purposes is the situation with the number two and the enclitics *-ij* and *-iji*, which in Chontal has led to the morphemes *chab'i* and *chäb'i* meaning “the day after tomorrow” and the “day before yesterday,” respectively. The character of root vowel /a/ in the original longer temporal adverb *chab'iji* “day before yesterday” likely changed to /ä/ because of the extra length of the enclitic and the usual movement of stress to the last syllable of Chontal words. Then the /h/ of the enclitic *-ihi* in *chäb'ih* also elided and the remaining *i-i* merged to form *i*. The final current result is *chäb'i* “day before yesterday.” The change resulting in *chab'i* “the day after tomorrow,” was much less complicated. As has happened in numerous words in Chontal, the original *chab'ij* lost its final consonant, in this case /j/. The current result is *chab'i*.

As a result, these two enclitics are quite grammaticalized. What were phonetically two different enclitics now are exactly the same phonetically insofar as they can still be said to exist as *-i* (/i/). The only way to distinguish between the words with the opposite meanings “the day after tomorrow” and the “day before yesterday,” is by the quality of their root vowels. What was previously indicated by two different enclitics is instead now indicated by the difference between the vowels in their stems. These enclitics have ceased, as such, to play a part in the meaning of these words and are only of historical etymological interest.

7.2.2.2 Clitics and Their Characteristics

In our discussion here we are most concerned with positions on clines taken by clitics and inflection. We have already, at various points throughout this study, discussed the characteristics of enclitics and described some ways in which they function. Hopper and Traugott (2003:5) note that

Clitics may be thought of as forms that are half-way between autonomous words and affixes. . . . They may share properties of both, although it is hard to make generalizations about which features will occur in a given instance. For example, clitics may resemble affixes in forming an accentual unit with the host. . . . On the other hand, clitics may behave more like independent words in having no effect on accent. . . .

In the case of enclitics in most, but not all, Mayan languages, the addition of an enclitic would indeed affect the placement of stress.³³⁶ But that is because of rather strict behavior concerning stress on the last syllable of a word. Because enclitics are not independent words and so must be attached to the end of words, this characteristic of stressing the last syllable still holds whether what is attached it is the noun of a verb-noun compound, an enclitic, a derivational morpheme, or inflection. We have already noted the evidence of this from Classic Ch'olan in that moving the stress further out from a root and its suffix often leads to elision of a vowel from that suffix.

There are indeed characteristics that clitics share with fully grammaticalized morphemes. As Hopper and Traugott (2003:143) note:

The functional characteristics of clitics are consistent with their status as units that are already in part grammaticalized. Compared with their full forms, clitic forms

³³⁶Nora England (pers. com.) notes that in some dialects of Mam with penultimate stress and others with heavy syllable stress, enclitics would not generally participate in such stress rules. This would also be true of Q'anjob'al to the extent that it has initial syllable stress.

are more context-dependent and more general in meaning. Often they have functions whose closest counterparts in other languages are clearly grammatical, such as aspect, modality, case, and participant reference (e.g., to person and number).

Characteristics such as these are noted in the both the ergative and absolutive dependent pronouns in the Ch'olan languages. Besides the stress placed on them in final position, they also change depending upon whether a word begins with a vowel, technically a glottal /h/ or a glottal stop, or a consonant.

Historically, clitics may serve as a stage on the way to morphologization. The Chontal examples noted above are one example from Ch'olan.

Morphologization involves the creation of a bound morpheme (i.e., an affix) out of an independent word by way of cliticization. The final stage of this process, the uniting of the affix with its stem, is referred to as "univerbation." Although univerbation can in theory include the uniting of the two parts of a compound into a single lexical item (e.g., boat + swain > bo'sun, cup + board > cupboard), the term is most often used in reference to a later stage of morphologization, as in examples such as Latin *clara mente* 'with a clear mind' > French *clairement* 'clearly,' where the second element has become a derivational affix. (Hopper and Traugott 2003:145)

Although some of the processes and characteristics of univerbation are similar to what occurs to lexemes when they travel various steps on the way to becoming clitics, they are more extreme in the case of univerbation.

The fusion of a lexical item and a clitic as stem and affix that typifies morphologization is accompanied by phonological changes of various sorts. Most

often these changes are characterizable as reductions: vowels and consonants are dropped, a stress or tone accent is lost causing an accentual readjustment over the newly formed word, and adjacent phonological segments are assimilated to one another. If the loss of the word boundary that once separated the two elements is included, some phonological adjustment is by definition always involved in morphologization. (Hopper and Traugott 2003:154).

7.2.2.3 Morphologization and Simplification

Another characteristic noted by Hopper and Traugott (2003:155) is that “one outcome of morphologization is morphemes that typically consist of simple, unmarked, phonological sets.” Typical developments such as these are clearly part of the reason why Robertson et al. are so adamant about not admitting the existence of the longer form of the enclitic *-ijiiy* ∞ *-iiy* despite the growing number of examples of precisely that form attached to verb stems. Combating their existence by pronouncing them “anomalous” and “strikingly bizarre” (Robertson et al. 2004:282) is a way to preserve the legitimacy of their theory, although doing so does not provide any reason at all as to why such forms should occur.

Although characteristics of both enclitics and morphological affixes can be identified in general, most of them taken alone could exist to varying degrees at different stages of grammaticalization. Even more important to note is that even though a certain form has become grammaticalized, that does not mean that less grammaticalized forms of the same morpheme will necessarily discontinue in use. Returning again to the oft-used English example “gonna,” Hopper and Traugott (2003:3) note that “the various stages of grammaticalization of *be going (to ...)* coexist in Modern English, although the change originates in the fifteenth century or perhaps even earlier. So despite over 500 years of grammaticalization, phonologically less reduced forms are still in use. If this is true of morphological forms, why could it not be even more true of enclitics which are not as far along the path of grammaticalization?

In sum, it should be kept in mind that these types of changes constitute a tendency and not a law. Also as noted, such changes can take place over a long period of time. The example of “gonna” and “going to” illustrates how more or less reduced morphophonological forms can exist side by side. What is more, the changes can also take place at a different rate among different social groups and in different dialectal areas (cf. Hopper and Traugott 2003:147). Thus, although it is valid to raise the question, it is not one that refutes the analysis presented in this present study since such variation can persist even in more highly grammaticalized forms for over a half millennium.

7.2.2.4 Reflexes of *-ijiiy* ∞ *-iiy* and Types of Morphologization

There are more specific, evidential rather than theoretical, reasons why the presence of the longer form of this particular enclitic is not surprising, even in later inscriptions. Both the long and the short forms are still in evidence even up into the Colonial and Modern languages. Although “two days ago” is quite considerably shortened morphophonologically to *chäb’i* in Modern Chontal, as already mentioned, the closely related language Ch’ol still has *chäb’ihi* with the same meaning, as shown earlier in Figure 195. The same figure shows Morán’s Ch’olti’ with both *chajb’i* (*chahbi*) and *chakb’ihi* (*chacbihi*), giving an indication that both allomorphs were still in use. This evidence is quite striking since of all contexts, one might expect the most advanced grammaticalization to have taken place in contexts in which numbers form a part of the lexeme. After all, in these cases, the enclitic operates on the level of individual words rather on that of phrases, clauses, or sentences as a whole.

Despite that, there is evidence that *-ijiiy* ∞ *-iiy* may still have been more of an enclitic all the way into modern times in Ch’ol, although in Modern Chontal the evidence of grammaticalization in the one case presented is convincing. Of course, this case is **not** one of **grammaticalization as inflection** but **rather** in the sense of forming a **single lexical item**. It has already also been argued based upon textual evidence that this enclitic’s reflex in Acalan Chontal *-iji* ∞ *-i* (*-ihi* ∞ *-i*) is present and performs as an

enclitic with basically the same functions on verbs as in Classic Ch'olan. Even in Acalan Chontal it is still present in an ungrammaticalized form. However, it is also highly possible that this same enclitic is, historically, the etymological source of Colonial and Modern Chontal's *-i* suffix marking completive inflection. In taking over this chore, the morpheme in this context has lost some of its previous meaning and no longer includes the direct referential quality it previously had, but has retained only the semantic concept of viewing or referring to an action or state as a whole, as a complete event. Still, one must keep in mind Hopper and Traugott's (2003:109) reminder – in a slightly different grammaticalization context referring to etymological sources of prepositions but quite applicable here – that “we cannot logically work backwards from some given point to a unique antecedent on the same cline. Absent a historical record, we cannot, for example, uniquely conclude from a cline . . . that any given” inflectional suffix “must once have been a certain” enclitic, “although we can state that it might have been.”

7.2.3 Characteristics Indicating *-ijiiy* ∞ *-iiy* is an Enclitic

7.2.3.1 Sentential Versus Phrasal Enclitics

Extensive evidence supporting the analysis of *-ijiiy* ∞ *-iiy* as an enclitic and not a grammaticalized morphological verbal suffix throughout the Classic-Period texts has already been presented earlier in Sections 5.2, 6.2, and 6.3. Only a brief review and summary will be presented here. In a very brief general description of how clitics function, Hopper and Traugott (2003:143) note that

Clitics are typically restricted to certain positions in the clause. One of these is next to a specific host; for example, possessive pronouns may form an accentual group with the possessed noun Such clitics are called "phrasal clitics," because they have a grammatical affinity for a particular type of phrase. Other kinds of clitics are not restricted in this way and are known as "sentential clitics."

An example of a sentential enclitic is provided by *-ix* in Acalan Chontal. It appears in second position, that is, attached to the first word in a sentence as we have already seen in Section 6.4.6. Compared to it, *-ijiiy* ∞ *-iiy* in Classic Ch'olan and *-ihi* ∞ *-i* in Acalan Chontal are not “sentential” but rather “phrasal” because they do attach to certain host words. However, the hosts available to these temporal deictic enclitics in Classic Ch'olan and Acalan Chontal are not as limited as they are in the Modern Ch'olan languages. Just using these two categories of clitics for classification does not provide a full picture of how clitics can function.

7.2.3.2 Wider Range of Meanings than Morphological Inflection

Very important to keep in mind is that, although the past temporal deictic enclitic is adverbial, it does not necessarily modify the host to which it is attached. Instead, it can form an adverbial phrase along with its host, often a time-period noun, a number, or a verb. Thus *ju'n winikjiiy* can be translated in context as “one month later,” “one month ago,” or “one month after.” When attached to a verb in these same distance-number contexts, it too performs a similar function, pointing out the temporal direction of the event stated, restated, or referred to as having happened earlier. The combination of the verb and enclitic constitutes, in context, a phrase which could be translated as “after he was born,” or “after it happened.”

In other contexts, without the distance numbers, the enclitic *-ijiiy* ∞ *-iiy* often serves the function of pointing the message of the whole sentence back to the relevant events already referred to in the narrative. In such cases it could be translated in English as “then,” for example, “He oversaw it then, *Itzamnaaj B'ahlam*.” However, since it performs a purely discursive function in many of these types of contexts, simply pointing back to the sentence that is the referent of the absolutive pronoun, it often requires no explicit translation in English. Finally, in distant past contexts, the enclitic points back from the present moment or the time of narration and in doing so connotes a more distant

past. In those contexts, the adverbial enclitic might be translated as “back then,” “earlier,” or even “in earlier times.”

Although the English equivalents of *-ijiiy* ∞ *-iiy* would vary depending upon these different contexts, the basic task of this adverbial enclitic to provide temporal directionality remains the same. Although it may be theoretically possible for a verbal suffix to provide that range of meaning, it is quite unlikely. As already noted, grammaticalization into a morphological suffix is usually accompanied by a reduction or specialization in meaning. The range of meaning and functionality carried by enclitics can be broader and more varied.

7.2.3.3 Broad Range of Hosts

More evidence for *-iiy* being an enclitic rather than a grammaticalized morphological verbal suffix is provided by the range of hosts to which it can be attached. If it were really a grammaticalized morphological aspect or tense suffix, these lexemes would be limited to verbs. Instead, we have already seen that it is attested as attached to a variety of nouns in the Classic-Period texts, including time-periods, non-temporal nouns, and gerunds. It also attaches to numerical adjectives serving in place of nouns. Finally, it also attaches to verb forms including CVC intransitives, passives, antipassives, intransitive positionals, positional antipassives, transitive positionals, derived transitives, transitive resultatives, and, albeit rarely, root transitives.

It is difficult to see how one could appropriately assign such a wide range of applicability to a morphological verbal tense or aspect suffix. To be sure, some of the enclitics appear on nouns in verbless (copulaless) sentences. Nevertheless, that characteristic of Mayan languages to regularly allow for verbless sentences and for ergative and absolutive dependent pronominal enclitics to attach to nouns in them does not extend to grammaticalized morphological verbal affixes. What is more, it is the same two forms *-ijiiy* and *-iiy* that occur on time-period nouns. In these contexts it is usually difficult to interpret each time-period noun plus enclitic as a separate verbless sentence,

especially when more than one of the time-period nouns has the enclitic attached or when some do and some do not.

All the difficulty that arises from interpreting either or both forms of this enclitic as a grammaticalized verbal suffix disappear immediately when one rightfully interprets them as enclitics. Not only is it possible for an enclitic to attach to different word classes, it is indeed one of the frequently cited identifying characteristics of enclitics.

Furthermore, attachment to different verb classes is one of the main ways to distinguish enclitics from morphological verb suffixes, especially tense and aspect suffixes.

7.2.3.4 Neither Allomorph “Moves the Action Back in Time”

One possible retort to the argument that *-ijiiy* and *-iiy* are enclitics based upon their behavior, is that perhaps we are really dealing here with two different morphemes, one of which is grammaticalized as a morphological tense or aspect suffix and another which is not. That is evidently the conclusion reached by Robertson et al. Although they do not state it explicitly, that may be why they now refuse to recognize any possibility of *-ijiiy* or *-jiiy* appearing on verbs in the Classic-Period texts. They do so despite explicit and repeated empirical evidence to the contrary, their appeals to “anomalies” and “bizarre” forms notwithstanding. One might perhaps draw on the “gonna” analogy as an example in that “going to” can be used both as a normal verb plus preposition indicating directional movement and as a morpheme indicating future in tandem with the more grammaticalized form “gonna.” On its face, this is not a good analogy since the shorter form *-iiy* is used in both nominal and verbal contexts whereas “gonna” cannot be used for contexts in which physical movement is meant. Nevertheless, it is still worthwhile to analyze whether there are indeed semantic differences in both function and use of the enclitics in the two contexts.

As noted earlier, in analyzing what they consider past tense inflection, Robertson (Stuart et al. 1999b:114) describes the function of *-iiy* on verbs by noting “It tends to move the action back in time.” This description of how it functions does not fit many of

the instances in which this enclitic is used. For example, neither the sentences specifying location (*uhtiyy* . . .) nor those identifying the one who oversaw an event (*ukab'jiyy* . . . and *ukab'iyy* . . .) “move the action back in time,” but both include that same temporal enclitic. This is also true of, for example, *uhtiyy* sentences referring back to a previous event.

Their description is perhaps more applicable to the enclitic’s use in the context of “distant past” events. However, nowhere do Robertson (Stuart et al. 1999a) or Robertson et al. (2004) even acknowledge the existence of this type of use. They do not provide a justification for why, within their theory, the main discursive timeline would switch to “past tense” instead of “present tense” in all other contexts. It seems unusual that exactly the same morphological tense suffix would indicate both past and distant-past time without additional modifiers or adverbs. Furthermore, as has been illustrated in Section 6.3.6 above, in some distant-past passages all, or almost all, of the distance numbers and verbs have the enclitic attached even though they would not in non-distant past contexts as exemplified in the example from Quirigua Stela E in Figure 242. Perhaps the closest Colonial or Modern Ch’olan examples of this type of distant past function is supplied by the enclitic *-ix* in Ch’ol and *-ihi* ∞ *-i* in Acalan Chontal.

Compared to the problems presented for theories that view the *-iyy* as a tense or aspect suffix, viewing it as an adverbial enclitic is much easier to justify. In all cases an adverb with the general meaning in English of “earlier, after, in the past, back then” providing the directional signal to either a much earlier time, to an earlier event, or to an earlier point in the discourse works quite well.

The functional description “moves the action back in time” is much more appropriate to the English past-tense morpheme. “I want it,” for example, refers to a desire that is current. Adding the past tense suffix “-ed,” as in “I wanted it,” does indeed “move the action back in time.” In “*uhtiyy Lakam Ha*” “It happened at Big Water,” it is not the action that is moved back in time by the enclitic. Instead, it is the temporal direction of the dependent pronoun’s referent that is being provided.

Finally, if indeed the *-ijiiy* ∞ *-iiy* enclitics accompanying “distant past” narrative were morphological tense suffixes, why would precisely the same forms be used in non-distant past contexts that are lacking the distant past connotations. One would expect that a specific distant-past morphological suffix might be played off against another morphological suffix indicating more recent past or at least past in general. But instead, the same adverbial enclitic appears in all these contexts. Although different in specific details in all three of these contexts – distance-number back-reference, discourse back-reference, and distant past – this enclitic conveys the same general sense of “earlier, back then, in the past.” Considering that it conveys this same meaning and performs the same function whether it is attached to adjectives, nouns, or verbs, the evidence for its being an enclitic rather than a verbal suffix indicating past tense or completive aspect is quite strong indeed.

7.2.3.5 Not Common in Single Sentence or Short Passages

Besides the evidence already presented for classifying *-ijiiy* ∞ *-iiy* as an enclitic, there is other, more circumstantial, evidence. It usually occurs only in passages with multiple sentences. What is more, the longer the passage, the more likely it is to occur. The temporal deictic enclitic *-ijiiy* ∞ *-iiy* occurs almost exclusively in texts in which there is more than one sentence and in which that particular sentence either refers to another sentence or is juxtaposed to events happening in a different time frame, that is, distant versus near past. It usually does not occur in sentences standing alone or in those relatively unrelated to others. This state of affairs is also acknowledged by Robertson et al. (2004:266): “With extremely rare exceptions, simple texts with few clauses or only one temporal statement occur, we propose, in the present tense.” What they did not do is provide a reason why this should be the case within the confines of their theory. What they also did not do is explain why what they designate as past tense should behave so differently from how past tense usually performs in other languages. What would make a

past tense morpheme appear on a verb in a sentence only or almost only when accompanied by other sentences?

Robertson et al. themselves emphasize that, in the Classic texts, when the deictic center or point of reference is not given contextually, that point of reference is the present moment. So there seems to be absolutely no reason why the past tense could not be used in single sentences considering that the default point of reference would always be available and is indeed the one they emphasize. Keep in mind that the default point of reference is not the sentence that is written but is rather the temporal deictic center that is used to determine whether the verb in the written sentence will be inflected for past or present. So, in any given sentence that appears without context, the verb could be inflected for either. Thus their theory offers no justification for why verbs in isolated sentences must be in the present tense except for one. That justification is simply the absence of *-iiy* on the verb. Of course, that is a perfect example of a circular argument. In fact, except for the circular argument stating that all verbs without *-iiy* are in the present tense, there is no reason why such a solitary sentence should not be either present or past.³³⁷ In sum, they are not allowing the context itself, other than the absence of the **ya** sign at the end of the sign group used to write the verb, play any role in evaluating the cogency of their analysis. Their system comes with a built-in rejection of semantic context.

In general, not occurring in isolated sentences is a behavior quite different from what is expected of present-past tense or incomplete-completive aspect marking. If this enclitic is instead either past tense or completive aspect inflection, should there not be many situations in which it appears alone in sentences without specific reference to other sentences or events or to a distant-past time frame?

Those who opt instead for a past perfect or pluperfect tense/aspect function for *-ijiiy* ∞ *-iiy* have much a better contextual argument because it is in the nature of the

³³⁷ I have left out here the reference that Robertson et al. make to the typological example offered by the Lulubo language as Andersen (1993) presents it. I will discuss this typological argument later in detail and argue that Robertson et al.'s description of how tense supposedly functions in "Classic Ch'olti'an" does not quite follow the pattern Anderson describes for Lulubo.

pluperfect to play off another event in relation to which it would be in the past. Nevertheless, there are many passages in which a pluperfect interpretation does not fit, for example in narrative back references not appearing in the context of distance numbers. What is more, the pluperfect does not fit in distant-past situations either. Instead, the partial match is due to the overlap between the domain of the pluperfect in English or Spanish, for example, and the domain of the past deictic enclitic in Classic Ch'olan and Acalan Chontal. Although this enclitic can be translated into the pluperfect in English in distance number contexts, even in those cases other translations are often possible or even more appropriate depending upon the exact syntax of the passage.

Analyzing *-iiy* instead as an enclitic not only justifies its characteristic behavior of rarely appearing in isolated sentences, but could predict it or at least determine the likelihood of its presence. Since its most common uses involve explicit back references triggered or established by pronouns, it makes perfect sense that such points of reference would most often be included in other sentences or passages in the same text. Thus single sentences with the enclitic attached to the verb would be less common. For example, the enclitic is often used when providing the time distance between two events. It would in most cases be difficult to provide a back reference to the date of an earlier event without mentioning it in a separate sentence, whether that sentence is in the current passage or in an earlier passage in the same text. It could be done if the author assumed the earlier event to be extremely well known, but the risk of the message not being understood would then be greater. If it were simply a statement couched in the completive aspect or past tense, especially with the default being the present moment, there should not be such restrictions on it. A sentence with a verb inflected for past tense or completive aspect should be perfectly understandable on its own.

The same type of restriction calling for an explicit referent would apply even more strictly to sentences in which the enclitic *-ijiiy* ∞ *-iiy* is used for discursive back reference, that is, when the temporal element involved has to do with the discourse time itself. In these cases, the use of the enclitic in solitary sentences would seem out of place and

perhaps not even understandable. However, a possible exception could be a discursive back reference to a visual depiction of the event about which the comment adds additional information.³³⁸ This type of restriction would, however, not seem to apply to distant-past contexts. Indeed, in such cases, the deictic center does seem to be the current time or era although not necessarily the present moment. However, the difficulty of these cases might arise instead from not having enough context to determine that the reference is to the distant past. Again, as with discursive back references, it would be possible for the context to be provided by depictions in paintings or carvings. However, these techniques may still not be common because of the possibility of misunderstandings. Also, in the monumental texts, the proclivity for presenting specific dates, even if obviously not of recent events, usually causes such presentations to be relatively expansive. For those reasons, enough information is usually provided for the temporal setting, from the dates if from nowhere else.

7.2.3.6 Narrative Back-Reference Contexts Favor Enclitic Interpretation

As already mentioned, it is especially difficult in the case of discursive back references to justify a past-tense morphological suffix interpretation. Based upon the context itself, there seems to be little room for disagreement that such passages are indeed providing additional information about the previous event or events. The two verbs occurring most often in these contexts are the intransitive verb *uhti* “happen” and the derived transitive *kab’i* “oversee.” The *uhtiiy* occurrences that are relevant here are those in which the location of an event or group of events is given. The *ukab’iiy* and *ukab’jiiy* occurrences that are relevant provide the identification of the person who “oversaw” the referenced events.

In the case of such discursive back references, there seems to be no perceptible motivation to switch to a past tense if indeed the verb in the previous sentence were inflected for the present tense. However, such a switch would be required if one

³³⁸ A possible example of this using the verb form *ukab’jiiiy* from Tikal Altar 5 was shown above in Figure 284.

interpreted the *-iiy* enclitic as past tense. Such a switch along the lines of “He is captured, *Ah K’an Usij*” to “He oversaw it, *Itzamnaaj B’ahlam*” would seem to be unmotivated within the confines of an “historical” or “factual” present theory. If one is telling a story using a historical present, the second sentence would likely be, “He oversees it.” instead.

An analysis that interprets *-iiy* as an adverbial enclitic indicating the temporal direction of the dependent pronoun’s referent provides better motivation for its occurrence in such contexts. When *-iiy* is interpreted as an enclitic, there is no need to switch temporal levels at all. Since both events, the capture and the overseeing, would have taken place in the same time frame, there is no requirement to change the actual time frame of the events but only to recognize the discursive back reference. “He was captured *Ah K’an Usij*. He oversaw it, *Itzamnaaj B’ahlam*.”³³⁹ The enclitic simply adds the temporal direction of the reference to the narration of the event or events. The same is true of the *uhtiy* sentences, which add the information as to where an event or events took place. In each case the unmarked absolutive pronoun provides the deictic reference to the events and the enclitic provides the direction of the narrative referent. It does not move “the action back in time.”

7.2.3.7 Semantic Contexts of Presence or Absence Favors Enclitic

Interpretation

Besides these interpretive appeals to the advantages of analyzing *-ijiiy* ∞ *-iiy* as an enclitic, there are other factors that point toward that conclusion. There are very few cases in which *uhti* appears in the type of contexts just discussed without the enclitic attached. There are more instances of *ukab’i* without the enclitic in the types of context mentioned for it. Since the enclitic in these contexts supplies the direction in the narrative of the referent events, it seems likely there would be more discretion to forgo an enclitic than a tense morpheme. The position pointed to in the narrative or timeline by

³³⁹Or “was in the state of having overseen it” if the verb is inflected for the resultative as in *ukab’jiiy*.

the dependent pronoun has not necessarily changed. Instead, the direction of the referent is only implicitly rather than explicitly indicated.

It is worthwhile to carry the comparison of *uhtiy* and *ukab'jiy/ukab'iy* in such contexts further. There is another trait they have in common that is not shared by other verbs occurring in syntactic roles similar to that of *ukab'i*. Some of these verbs were discussed in the section dealing with resultative inflection. It was noted there that, unlike *ukab'iy*, some other verbs that occur with resultative inflection such as *yitaaj* “join, accompany” and *yatiij* “partner (with)” are almost never found with the enclitic attached. It is absent despite these verbs’ occurrences in statements referring back to something in the previous passage or passages. Why would *ukab'iy* most often have the enclitic attached while they do not or almost never do? Further, what is it that *ukab'iy* might share with *uhti* in these contexts that it does not share with *yitaaj* and *yatiij*? I propose that the critical difference lies in the referent of the absolutive pronoun of the two sets. In the case of *yitaaj* and *yatiij*, the unmarked absolutive pronoun points to an individual or individuals mentioned earlier, in the same sentence, or elsewhere in the text. In the case of *ukab'jiy* and *uhtiy*, the unmarked absolutive pronoun points to an event or events mentioned earlier in the text. In the case of “Joined/accompanied **him/her** [Named Subject]” and “Partnered **him/her** (object = person referenced) [Named Subject]” the direct referents of the absolutive pronouns are gods or people. The emphasis is on the relationship of the person who is the grammatical subject to the person who is the grammatical object – not on the events just narrated. The deictic absolutive pronoun points to a person or god and not to narrated events. What is important to the author in these contexts is establishing the existence of a relationship and not pointing out the discursive temporal direction to where an event is mentioned in the narrative.

With “oversaw **it** (object = event referenced) (Named Subject)” and “**it** (subject = event referenced) happened [at] (Place),” the emphasis is on the events just narrated. The absolutive pronoun points to those narrated events. Because the narrated events are the focal point of the additional comment, it is more important to provide the temporal

pointer back to where these referenced events are reported in the narrative. This is accomplished by including the adverbial enclitic *-ijiiy-iiy* on the verb. If *-iiy* is interpreted instead as past tense inflection, one is left without an explanation for the lack of this suffix in very similar contexts.³⁴⁰

7.2.3.8 Irregularity of Behavior Points Towards Enclitic

The recognition that *-ijiiy-iiy* is an enclitic and not morphological verb inflection, also helps to explain other behavioral characteristics that are attested in the Classic-Period texts. Such seemingly tangential evidence also strengthens the argument in favor of its recognition as an enclitic rather than a tense or aspect morpheme. The behavior of the enclitic is not as regular as one would expect if it were inflection. The presence of adverbs is not as mandatory as would be morphological verbal inflection, in part because adverbs most often tend to clarify, elaborate, emphasize, and explain situations and events rather than present basic information about them. If verbs are inflected for tense in a language, that inflection usually has to be employed in order to easily communicate without undue misunderstanding. It is often very critical to know whether an event occurred before a certain moment (past) or is occurring at a certain moment (present).

Likewise, if verbs are inflected for aspect in a language, that inflection usually has to be employed to easily communicate that an event is being spoken of or written about as a whole (completive) or from the “inside” as still, about to be, or usually underway (incompletive). But in a variety of circumstances, *-ijiiy* ∞ *-iiy* is not used by scribes although one might otherwise expect to see it in such contexts and it would likely be required if it were tense or aspect inflection. Yet despite the absence of the enclitic,

³⁴⁰The semantic context that aligns *ukab'ij* closer to *yitaa**j* and *yatiij* than to *uhti* is emphasized instead by the resultative suffix *-VVj* which emphasizes the effect on the status of the individuals in the reported relationship whether it is with an individual or to an event. Also, this hypothesis does not address *yilaaj* which also rarely takes the enclitic although its object is not a person but usually a calendrical event. MacLeod (2004:302) has speculated that the lack of the enclitic in the latter case and in the case of *yitaa**j* may be because they “tend to introduce esteemed participants not previously mentioned. However, those individuals would be the referents of the ergative pronoun subjects and not the absolutive pronoun objects.

everything else about the passage appears to be the same, including the message that is conveyed. Only the temporal direction of the pronoun's referent would not be explicit.

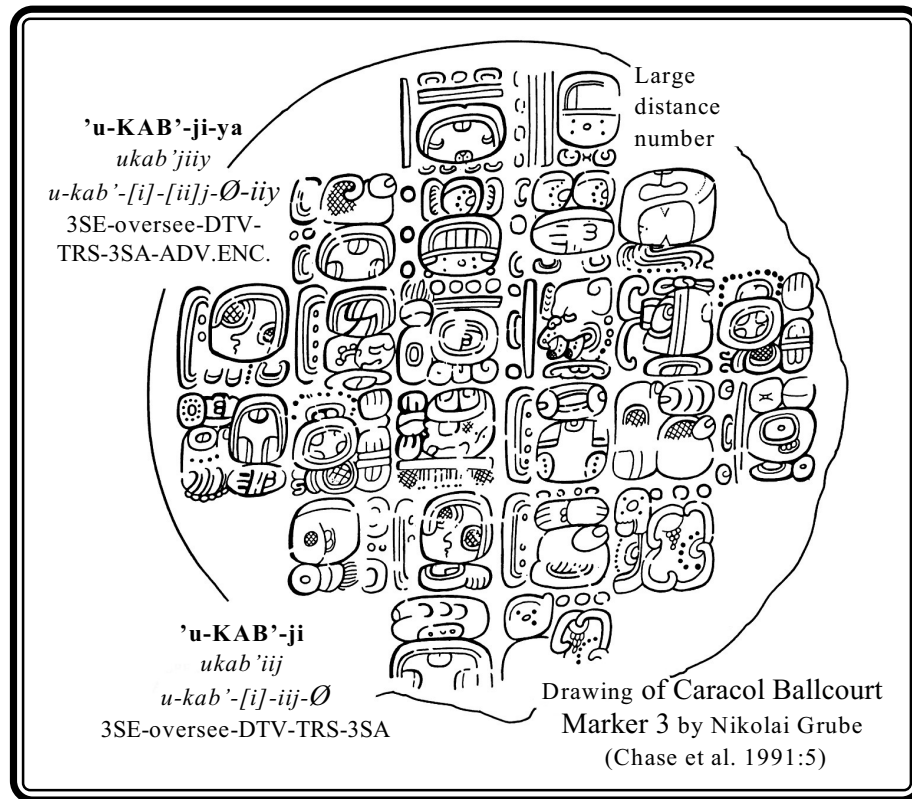


Figure 300. Past temporal enclitic used with distant past event but not with more current one

A context in which *-ijiiy* ∞ *-iiy* is sometimes not used by scribes, although one might otherwise expect it, is on part of a text that contains a narrative about more current events when another portion of the texts contains a distant-past narrative. This distant-past narrative will, however, use the past enclitic on at least one of the usual verbs. The passage reporting the relatively more recent events seems to avoid the use of the past temporal enclitic although it may otherwise be present on the same verb in similar sentences. This occurs, for example, on Caracol Ballcourt Marker 3 as shown in Figure 300. In the portion of the text set far back in time, the enclitic is used on *ukab'ij*

resulting in *ukab'jiiy*. However, after a distance number of almost 470 long-count years, the same verb is written as *ukab'iiy* instead, that is, without the past temporal enclitic.

Because this happens most often on relatively early monuments, these occurrences of the enclitic may be driven by the distant-past contexts rather than by a back-reference to overseen events which is otherwise often the case. This interpretation is corroborated by distant-past passages elsewhere that include the enclitic on verbs that normally do not take it. The impetus for the presence of the enclitic may be the same as that on Quirigua Stela E shown earlier in Figure 242. As noted, some of the verbs in those passages have the enclitic attached although they would not in other contexts. Also, verbs that later often include the past adverbial enclitic in later texts, do not do so as the *ukab'iiy* examples from Tikal Stela 31 and Naranjo Altar 1 illustrate. At the same time other verbs already do make regular usage of the same enclitic, as, for example, *uhtiyy* on Tikal Stela 31.³⁴¹

If indeed the early and later inscriptions were instead employing the same or even similar aspect or tense suffixes, this amount of variation in similar contexts might be difficult to explain. At a minimum, one would need to provide a reasonable hypothesis to account for it. If one instead concludes that *-ijiiy* ∞ *-iiy* is an enclitic that also occurs on time-period nouns, one could take a look at its behavior in those contexts for clues. However, in assessing my conclusion that this is indeed the same enclitic that appears on numbers and time-period nouns Robertson et al. (2004:282) warn:

The use of *-ij-iiy* on numbers, which Wald apparently sees as involving the same elements, is consistent, **never showing the variability** that he suggests is the norm. In the text Wald cites from Copán, the numbers make rigid use of these elements, in total distinction to the verbs within the same text.³⁴²

³⁴¹For the complete text of Tikal Stela 31 see drawings by John Montgomery (Schele 1990:98-99) or in Jones and Satterthwaite (1982:Figure 52). For the complete text of Naranjo Altar 1 see Graham (1978:103).

³⁴²It is clear from the reference to the Copán example here and from other passages in their article that they often do not distinguish between numbers, time-period nouns, or adverbs when referring to the
(continued...)

Although on Copán Altar F', *winik* and *haab'* – which are actually time-period nouns as can be seen in Figure 286 – do take the forms of the enclitic usually found on them, it is emphatically not the case at all that these nouns “never” show such variability, as already pointed out earlier in this study.³⁴³ There are, to be sure, some examples of distance numbers on which the past enclitic forms on time-period nouns follow what might be called the “usual” pattern. One example is that from Palenque Temple XIX Platform shown above in Figure 201 on which the enclitic is written with **ji-ya** on the **WINIK** sign and with **ya** on all three higher time-period nouns.

However, there are also many distance numbers that do not follow the “usual” pattern. On the Caracol Ballcourt Marker 3 shown in Figure 203, **WINIK** takes only a **ji** sign, the **HAB'** and **PIK** take a **ya**, and the **WINIKHAB'** does not take an enclitic at all. In the distance number example from the Palenque Temple of the Cross Tablet shown in Figure 202, the enclitic on **WINIK** is written **ji-ya** but none is attached at all to the **HAB'** or **WINIKHAB'** glyphs. In the distance number from the Palenque Temple of the Foliated Cross Alfardas in Figure 200, the past temporal enclitic is only present on the **HAB'** glyph for *haab'iiy* while the other four time-periods have no attached enclitic at all. On an unprovenanced panel from the Piedras Negras area shown in Figure 232, the enclitic taken by the *winik* and *haab'* time-period nouns is the opposite of their usual forms with just **ya** written after the **WINIK** sign and **ji-ya** written after the **HAB'** sign.

Even these examples do not exhaust the variation in the forms and in the presence or absence of the past temporal enclitic that can be found on the time-period nouns in distance numbers. What is more, both of the allomorphs *-ijiiy* and *-iiy* as well as the alloform *-jiiy* are found on numbers. Nevertheless, the meanings of the various passages

³⁴²(...continued)
references.

³⁴³Neither do I ever indicate that this variability is “the norm” but rather simply point out that both forms do appear on each of the two time-period nouns despite the longer allomorph being more common with *winik* and the shorter being more common on *haab'*.

are not changed by the variation in forms nor by the presence or absence of the **ji-ya** or **ya** signs on more than one time period, but the actual transcription, reading, literary style, and perhaps emphasis, is.

Similar variation occurs with verbs as well. For example, while both *ukob'o'w* and *ukab'jiy* are adjacent parallel verbs near the end of the Palenque Tablet of the 96 Glyphs, only the second verb has the enclitic attached. With an interpretation of *-ijiy* ∞ *-iy* as an adverbial enclitic and not inflection and by comparing it to the enclitic on time-period nouns, one appearance is all that is required to supply the directional temporal indication that the scribe wishes to convey. Although the scribe could have added it to both verbs, it is not required syntactically, grammatically, or semantically. That the glyphic **ji-ya** version of the enclitic also occurs on verbs has already been sufficiently argued on the basis of several examples in Section 6.5.9.2. In sum, the variation among the forms of the enclitic whether on verbs, numbers, or time-period nouns is similar throughout the Classic-Period texts. Similar variation continues on numbers and temporal nouns, adjectives, and adverbs all the way into the Colonial and Modern Ch'olan languages and even on verbs in Colonial Acalan Chontal. The similar formal variation, semantic connotation, and contextual function of this morpheme among these different word classes both in the Classic-Period texts and among the direct descendants of Classic Ch'olan provides extremely strong evidence that we are confronting forms of exactly the same enclitic and not an enclitic in the case of numbers and time-period nouns and a morphological aspect or tense morpheme in the case of verbs.

7.2.4 Absolute and Relative Tense: Tense and Taxis

In earlier parts of this study, the terms “tense” and “taxis” have been used to refer to two different types of verbal inflection. Comrie refers to these same two ways of treating time verbally but identifies them using two different, more traditional, terms. Those two terms are “absolute tense” and “relative tense” corresponding to Maslov’s

(1988) and others' terms "tense" and "taxis" respectively. As Comrie (1985:36) himself notes,

The term absolute tense is a traditional, though somewhat misleading term, that has come to be used to refer to tenses which take the present moment as their deictic centre. The term is somewhat misleading because, strictly speaking, absolute time reference is impossible, since the only ways of locating a situation in time is relative to some already established time point.

It is Comrie's "absolute tense" to which Robertson et al. (2004:260) are referring when they explain this distinction between tense and aspect:

There is common consensus that tense and aspect are verbal categories . . . and that . . . tense is deictic, referencing the here-and-now of the speech act Thus, while tense and aspect both characterize a verbal state or action, . . . tense requires that the narrated verbal action or state refer to time, usually the here-and-now of the speech act. . . . Accordingly, tense is deictic, since deixis occurs whenever the narrated event refers to the speech event.

Except for some uncertainty concerning the last sentence, this quote is in line with what I have referred to as tense and what Comrie (1985:36-55) reluctantly classifies as "absolute tense." I also agree with the last sentence in the quote from Robertson et al. to the extent that indeed tense morphemes and other grammaticalized structures are deictic, that is, that they point to a time before, during, or after whatever that position in time is. In the case of "absolute tense," one does not know the actual time to which the statement points, whether it be past, present, or future unless one knows the position in time of the speaker or the narrator whether this be, for example, in actually current conversation or in a narrative such as a novel or a history book, whether it reflects the narration of an event

as in the past or as in a vignette with the writer and reader transported narratively back to a bygone time.

In many Classic-Period texts that refer to a depicted scene such as the one shown in Figure 301, statements are made that in English, Spanish and many other languages would be translated into the present tense: *ub'aah ta okte'le(l) b'a(h) ch'ok* “[It is/This is] his image in *okte*’ship, the first/head youth. It refers to the image of a boy, the primary offspring, being installed into an official position, likely as the next in line to the throne. In this case as we know from the rest of the text on the Tablet of the Cross, it refers to the eldest reported son of *Janaab' Pakal*, *Kan B'ahlam*. There is no need in Classic Ch’olan, however, to add any tense markings nor even to include an actual verb.

Instead, the context indicates that this verbless sentence is best translated into the English present because it is referring to the image right next to this text. Such verbless, stative sentences occur in all of the Mayan languages including those of the Ch’olan and Tzeltalan families. Of course, if the context were different and it were clear from the context that the reference was to a past time, the Classic Ch’olan sentence would not change, but the context would dictate its translation into the past tense in English. It is important to note that no tense or aspect markers are needed to indicate temporal location or relationships in these types of sentences.

7.2.4.1 Relative Tense: Taxis

In general, the terms “relative tense” and “taxis” refer to the same linguistic phenomenon. Comrie (1985:56) describes relative tense as “where the reference point for location of a situation is some point in time given by the context, not necessarily the

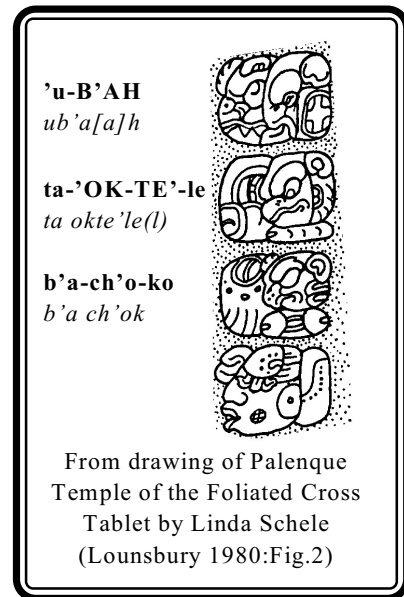


Figure 301. Verbless sentence

present moment.” More explicitly, relative tense is used “where a situation is located at, before, or after a reference point given by the context.” Comrie also calls this “pure relative tense.” Although not completely identical from a conceptual standpoint, Maslov’s definition of “taxis,” which has already been presented earlier, is quite similar:

Taxis is a category which defines the “action” denoted by the predicate in terms of its relations with another “action”, named or implied in the given utterance, that is, the chronological relations between them (simultaneity, precedence or sequence), and also the opposition of the secondary “action” to the principal one. (Maslov 1988:64)

Comrie also distinguishes between “pure relative tense” and “absolute-relative tense.” Absolute-relative tenses “are determined by a reference point being before or after the present moment and by the situation being located before or after that reference point” (Comrie 1985:65) A good example of absolute relative tense would be the English pluperfect for which “there is a reference point in the past, and that the situation in question is located prior to that reference point.” Maslov’s (1988:64) approach, which I find clearer and more transparent, describes the pluperfect and other such complex constructions as hybrid combinations in which “aspect, tense, and taxis often interact.” Such hybrids are frequent “in practical use.”

For instance, aspectual oppositions often have taxis functions (as in Russian). In other languages tense pairs up with taxis in the forms of so-called relative tenses (doubly oriented tenses, like the pluperfect or future in the past) (Maslov 1988:64).

7.2.4.2 Power of Adverbs

In an approach that I think is illuminating considering the importance I have been placing on adverbs and adverbial enclitics in the Classic Ch'olan narratives, Comrie undertakes the difficult task of elucidating relative tenses and contrasting them with absolute tenses by calling on examples using time adverbials instead of tense. He observes that by using examples with adverbs “it is somewhat easier to see precisely the factors involved” (Comrie 1985:56). In other words, one is able to accomplish the same meaning and narrative flow with adverbs as with tense. In fact, using adverbs instead of tense actually makes the narrative distinctions easier to comprehend. Thus it seems there is more functionality in such adverbs than expected or allowed by those who cannot bring themselves to believe “that the only thing that we would ever see in the script is the completive with this *-i* on it, in order to refer back” (Robertson in Stuart et al. 1999b:117) – as they characterize it – and who would consider it an “untenable” view to think that “the suffix *-iiy* is not a member of the completive/incompletive system, but is a mere deictic clitic” (Robertson et al. 2004:265). Of course, there are ways other than using this particular adverbial enclitic to express time and temporal relationships in the Classic-Period texts. However, this adverbial deictic enclitic is a very important one. The scribes are indeed not giving up functionality by using means other than grammaticalized tense or aspect to accomplish the same goals. Comrie’s use of adverbial examples to describe how tense and relative tense work stands as a modern-day testament that using methods other than grammaticalized tense does not necessarily lead to a loss of functionality.³⁴⁴

7.2.4.3 Theory: All Tense is Relative in “Classic Ch’olti’an” and Lulubo

It is relative tense rather than absolute tense, or in terms of usage in this study, taxis rather than tense, to which Robertson et al. turn to explain their view of how the

³⁴⁴ At any rate, such value-laden judgments regarding particular discursive methods of accomplishing similar goals by writers of a language seem strangely out of place for modern linguists. One is reminded of Gelb’s and Havelock’s deprecation of the functionality of all non-alphabetic writing systems and their supposed inability to express abstract or complex thoughts by employing them (cf. Houston 1994:31-34).

Classic Ch'olti'an narrative works. The language they pick as a typological ally is that of Lulubo, a member of the Moru-Madi language family spoken in the region where the countries of Sudan, Uganda, and Zaire share common borders. Robertson et al. (2004:266) state that "Classic Ch'olti'an narration seems closely allied typologically with Lulubo, where the contrast is neither aspect nor absolute tense (present moment as the deictic center) but rather relative tense (contextually given point-in-time as the deictic center)." They then provide this quote from an article written by John Anderson whose description of the behavior of relative tense in Lulubo, according to them, "coincides with the narrative line of the Maya hieroglyphs."

[T]he perfective [past] form can be interpreted as a relative past tense, and the imperfective [present] form can be interpreted as a relative non-past tense. In narratives, each event on the event line provides the reference point for the location of the situation described by the next clause. If the time of that situation is past relative to the reference point, the perfective [past] form is used; and if it is non-past, the imperfective [present] form is used. . . . *[W]here the context does not provide any explicit reference point, the latter is, by default, taken to be the present moment* (Andersen 1994: 256, our emphasis). (Robertson et al. 2004:266-267, words in brackets and italicized emphasis added by Robertson et al.)

Robertson et al. (2004:267, emphasis added) conclude this reference with the broad statement: "Andersen's synchronic description of present/past nicely describes, in morphological and semantic terms, the **entire corpus of the Maya hieroglyphs.**" To illustrate how this is true of the whole corpus, Robertson et al. provide **one example** borrowed from Houston's earlier *The Shifting Now* article. What is more, they report that this "passage remains somewhat opaque because of erosion." Nevertheless, they continue, "many other examples could be added – the pattern of alternation or restatement is well-known to Maya epigraphers – but one will suffice." Of course, not all of the

passages throughout, in Robertson et al.'s (2004:278) words, "the breadth and depth of the hieroglyphic corpus, probably in excess of 15,000 texts (including those on potsherds)," have constructions or patterns similar to the one shown. This type of pattern is usually seen in texts of some length, usually those of several connected or consecutive sentences. Also, just the passages I have already included in this present study, have illustrated several types of patterns using these very forms, *-ijiiy* ∞ *-iiy*, in ways that are clearly not identical semantically or syntactically. By avoiding a detailed look at the contexts and the varied ways in which just this enclitic alone is used, one may be tempted to make the bold claim offered by Robertson et al. Even with all the patterns I have shown, I am quite sure that the types of patterns and contexts have not yet been exhausted.

Another important result of the lack of attention to the detail of particular passages in the actual texts, is the slant put on the statements by Anderson concerning Lulubo and also upon the meaning of relative tense as defined by Comrie and others. In this regard, it should be noted that in his article on Lulubo, Andersen (1994:256) follows closely Comrie's definitions of tense. Earlier in Robertson et al.'s article as quoted above, they provide a definition of tense that is actually for what Comrie's calls "absolute tense" and for which the deictic center is the current moment of speaking or writing. If one uses adverbs to make things clearer, this would be similar to time adverbials such as "*today* (the day including the present moment), *yesterday* (the day preceding the day including the present moment), *tomorrow* (the day following the day including the present moment)" (Comrie 1985:56). According Comrie's "terminology, these are all instances of absolute time reference." If these were grammaticalized forms, this would be absolute tense.

In describing how Lulubo narrative works, Anderson is not referring to absolute tense but rather to relative tense, as are Robertson et al. in the context of the Classic-Period texts. In the case of relative tense, "the reference point for location of a situation is some point in time given by the context, not necessarily the present moment" (Comrie

1985:56). If one were using adverbials instead, they would be relative time references “such as *on the same day*, *on the day before*, *on the next day*.” These are all “adverbials which locate a situation relative to some reference point given by the context.” What is left unsaid in these cases is just what day is meant. It may be “on the next day” but that would raise the question “the next day after what?” (Comrie 1985:57). To find out, one would look to the deictic center and that center is given by the context. So for Anderson’s Lulubo, the deictic center is not normally the time of speaking but rather is given by the context. In the statements referring to that center point, the perfective (or past) is used when the situation in the statement is before the reference point. The imperfective (non-past) is used when the situation in the statement takes place at the same time or after the reference point.

7.2.4.4 Questioning the Analogy with Lulubo

There are several reasons why one might question the way Robertson et al. use this analogy with Anderson’s Lulubo, not of which all are of the same importance. First, as noted by Comrie (1985:56) and quoted by Andersen (1994:256), the main difference between absolute tense and relative tense is that for relative tense “the reference point for location of a situation is **some point in time given by the context**.” Robertson et al. (2004:266) also explicitly state for both Lulubo and the Classic-Period texts, “the contrast is neither aspect nor absolute tense (present moment as the deictic center) but rather relative tense (contextually given point-in-time as the deictic center).” However, it is notable that Robertson et al. (2004:266) in quoting Andersen add their emphasis to what should be the fallback situation for relative tense, that is, “[W]here the context does not provide any explicit reference point, the latter is, by default, taken to be the present moment.” Even more important than their emphasis is how they make use of this default. They make it the norm in the Classic texts. But, if in almost every case the center of reference indicated by the context were the present moment, it seems one would indeed be dealing with **absolute tense** and **not relative tense**.

Robertson et al. take two steps that assure the outcome they desire. First, they indicate that all tense in the Classic texts is relative, thereby stressing the situation in which the reference point is not explicit but given by the context. Second, they contend that on the main timeline, which includes most of the sentences, the deictic center defaults to the present moment. Without taking account of the specific semantic and syntactic context, they simply decide it always defaults to the present moment. The remainder of the texts in which the *-iiy* is present simply play off that default moment, or in other words, off the current moment in time. In their theory, no attention need be paid to deciding what the deictic center might otherwise be or whether some of the activities reported, such as births and deaths, might make better sense if one couched them instead in tenses other than the present. Nor does it seem to matter to them that the use of specific dates, clearly in the past based upon explicit links to later dates in the same text, might somehow provide a context in which some of them might be conceived of as in the past when initially narrated. Nor do they allow any isolated sentences or even many shorter passages to contain past events. Only sentences that refer back to another are allowed to be couched in the past tense. The idea of the context providing the information about whether an event is reported as being in the past is only given lip service, since they have predefined it without the necessity of taking the context into account. And how have they predefined it? Simply by looking at the form of the verb. If it does not have the *-iiy* on the verb, they conclude it has to be narrated as happening at the present moment.

Second, the approach taken by Robertson et al., in equating Classic-Period tense to that found by Anderson in his analysis of Lulubo, is that every sentence immediately presumes the deictic center is the present moment if there is no *-iiy* present. In effect, they continue to equate what they define as “relative [present] tense” to what is otherwise defined as “absolute [present] tense.”³⁴⁵ What is generally classified as “relative tense,”

³⁴⁵The word “present” is inserted here because, in effect, there is **no place in their theory for any absolute past tense**. Because all verbs without *-iiy* are not allowed to function as past tense, that is, as past relative to the present moment of the narrative, past tense in the absolute sense is non-existent by definition.

because it relates two events to each other, is instead made indistinguishable from “absolute tense.” This is accomplished by pre-defining the other event as the present moment. These verbs do not carry any tense inflection, that is, they are unmarked for tense. It is only the sentences with verbs supposedly “inflected” by *-iiy* that then refer back to some other event and so are past in relation to it. However, just two examples from Lulubo should plainly show that this is not at all how Andersen analyzes that language.

(43a)	<i>má</i>	<i>rí</i>	<i>á rí</i>	<i>àlō</i>				
	1S	GEN	word	one				
	‘This is my story’							
b)	<i>ánḡá</i>	<i>wí</i>	<i>ē – kī</i>	<i>džúrú – ō</i>				
	ADV	monster	3+CP-go/PF	village-LOC				
	‘Once upon a time a monster came to the village’							
c)	<i>àzī</i>	<i>k – ítfōlō</i>	<i>rī</i>	<i>bânī</i>	<i>nī</i>	<i>ḡ – tē</i>	<i>nī</i>	
	then	3-start/IMPF	TR	people	GEN	NF-swallow	ACC	
	‘Then it started swallowing people’							

From Andersen (1994:256)

Figure 302. Example from Lulubo using “perfective [past]” with current moment as deictic center

Figure 302 shows Andersen’s Example 43. In 43a, the story starts out in a sentence without a verb, a technique that is similar to verbless (copulaless) sentences that are well known among the Mayan languages including Classic Ch’olan. It is the next sentence in 43b that then is framed in the perfective to start the actual story. Finally, the third sentence, 43c, the actual beginning of the story itself, rather than providing the setting, is in the imperfective. In his explanation as to why 43b is in the perfective instead of the incomplete, Andersen (1994:256) states “In this fragment, the b-clause describes the very first situation mentioned in the narrative, Consequently, its time is located relative to the present moment as a relative past. Thus unlike Robertson et al., taking the present moment as the deictic center can actually bring about the use of the

perfective (past) and does not necessarily default to the present (imperfective). There are, to be sure, passages from Lulubo in which the imperfective can instead be used in similar contexts, but that is not the relevant point here. What is relevant is that recourse to the default deictic center of the present moment can just as well result in the use of the perfective (past).

(45a)	<i>kàlāsì</i>	<i>lómbarì – gó</i>	<i>kɔ – ngā</i>			
	then	Lumbari-SG+MASC	3-rise/IMPF			
	‘Then the Lumbari man set off’					
b)	<i>kɔ – dē</i>	<i>èwá</i>	<i>rí</i>	<i>bó – ā</i>		
	3-fall/IMPF	elephant	GEN	track-LOC		
	‘and followed the elephant’					
c)	<i>lágó</i>	<i>āwē</i>	<i>ìmbá</i>	<i>píɔ</i>	<i>èwá</i>	<i>nī</i>
	3S	3+walk/PF	month	whole	elephant	GEN
	<i>ò – ndū – lě</i>					
	NF-search-SUF/LOC					
	‘He walked for a whole month in search of the elephant’					
	From Andersen (1994:257)					

Figure 303. Example from Lulubo including shift to perfective (past) attributed by Andersen to reference point shifting to present moment

The passage in Figure 303 includes part of Andersen’s Example 45. The verbs in 45a and 45b are both inflected for the imperfective (present). However, the verb in 45c is instead inflected for the perfective (past). Andersen is here less certain as to why the perfective should appear here, but for us the important detail is what type of explanation he thinks might answer the question. “Perhaps it indicates that the reference point is shifted back to the present moment” (Andersen 1994:257). In other words, the speaker must have placed himself outside the story and presented the information as a comment made from the standpoint of the present moment. Again, that is quite different from Robertson et al.’s approach of assuming that **in all cases** in which the verb does not have *-iiy* attached (excepting transitives), the point of reference is the present moment **and** the verb is in the present tense.

Third, if one actually looks at the context for the deictic center without taking the lack of *-iiy* on the verb forms into account and notices the dates that very often accompany the events that form the “deictic center” in such cases, one can quickly see from the context that these events at each deictic center are most often dated. When the text contains several dates and events, the succeeding calendar-round dates are sometimes later in time than the previous ones. In these cases, it would seem that there is a *prima facie* case for the earlier events to be reported as in the past relative to the later ones or to the latest one. So, all things being equal and absent a pressing external requirement for it to be otherwise, one might suggest that each successive date and verb combination relate past events written at about the time the monument was erected. This is especially true in those cases where the actual erection of the monument itself forms part of the narrative – usually accompanied by the latest date. At least for all the texts such as these, it would take some extremely strong linguistic evidence to be convinced that every single verb (other than root transitives) lacking *-iiy* is inflected for present tense. The progression of dates in a narrative would seem to indicate otherwise, absent a near universal use of the so called “historical present” throughout the inscriptions. But despite the *prima facie* likelihood of a past-tense connotation for many of these events reported using verbs without the *-iiy* enclitic, Robertson et al. reject that view, favoring instead a type of “factual present” or “historical present” quite indistinguishable from the “historical incomplete” as proposed earlier by Houston (1997). But it seems that they reject the view of a past-tense historical narrative not because their view makes more sense from a narrative or discourse standpoint.³⁴⁶ Instead, their rejection is based upon the demand that both the present and past inflection (formerly incomplete and complete aspect) **must**

³⁴⁶Indeed Robertson et al. (2004:266) reject Hopper’s (1979:213) view in his “discussion of aspect and foregrounding in discourse” (Houston 1997:299) “where the complete renders the skeletal story line, and the incomplete amplifies those events.” What is more, Houston (1997:296) had already suggested that rejecting the “historical incomplete” might be based upon a “unconscious attempt to follow Western modes of structuring historical accounts, typically in the past tense.” Nevertheless, he found it less “Western” to equate his view with a rather common storytelling pattern or genre in English, the “historical present” based upon tense rather than aspect.

be represented in any verb system and that the presence and absence of *-iiy* are the only likely candidates for this opposition.

8 Language of the Classic Maya Script

8.1 Working Hypothesis

Most texts that have been the subject matter of this study come from the areas of southeastern Mexico, including the states of Tabasco, Chiapas, Campeche, Yucatan, and Quintana Roo; from the countries of Guatemala and Belize; and from the northwestern portion of Honduras. They have been written over a period of about 600 years from approximately 300 AD to 910 AD. There are earlier and later texts, but they have not been considered in detail here. While not wishing to over-generalize concerning the language or languages represented in the texts examined here, I adopted a working hypothesis that provisionally accepted most texts written during what is called the Maya Classic Period as representing a relatively unified language or language group unless specific linguistic evidence indicated otherwise.

8.2 Brief History of Classic Maya Hieroglyphic Language Identification

This unified-language hypothesis is based upon a relatively long and, especially recently, very productive history of epigraphy. One factor driving this approach is the similarity of the glyphic signs in the texts despite minor differences in style. This approach, although limited mainly to calendrical signs, was reflected in the works of late 19th and earlier 20th century investigators such as Förstemann (1904a, 1904b) and Goodman (1897). Around the middle of the 20th Century Gates ([1931] 1978) and Zimmerman (1956) produced glyph catalogues of the signs found in the codices. Then Thompson (1950, 1962) produced two important works that catalogued most of the known hieroglyphic signs, notably including those from the monumental texts. This assumption of close similarity, if not identity, of the languages written using those signs remained a useful tool throughout the remainder of the 20th century. The multitude of decipherments made with this working hypothesis has proved its value many times over.

Most epigraphers who have specifically addressed the question of which language or languages are represented in the Classic Maya script have long been in basic agreement that they were of the Yucatekan and Greater Tzeltalan families, especially the Ch'olan family subset of the latter. In the case of earlier researchers, that determination was often based mainly upon the languages spoken in Colonial or Modern times in the areas in which inscriptions were found or in the areas where it was thought the texts originated. Among the many researchers who made identifications are included Rafinesque (1828): Tzendal (Colonial Tzeltal); Rosny (1876a; 1876b): Yucatek; Thompson (1950): Yucatek and Ch'olan; Kelley (1976): Yucatek and Ch'olan. Others reached similar conclusions but argued instead from the textual content of the inscriptions. These include, among many others, Knorozov ([1955] 1967): Yucatek, Schele (1982): Ch'olan during Classic Period; MacLeod (1984): Ch'olan and Yucatekan; Campbell (1984): Ch'olan origins borrowed by Yucatekan speakers.

Many of those who stressed Yucatekan worked mainly with the codices. Knorozov leaned toward Yucatekan since he did most of his direct work on the codices, which were thought to have come from the northern part of Yucatan. Thompson, who dealt extensively with the monumental inscriptions as well as the codices, often stressed Ch'olan as a source for glyph interpretation. He supposed that both Modern Yucatek and Ch'ol speakers would have been able to understand the language of the inscriptions. However, he still thought it was possibly closest to 16th Century Yucatek. Of the writing system itself he stated that “the inventors of the hieroglyphic writing spoke a language which was very close to Modern Yucatec and to Chol-Chorti-Mopan” and that they “probably originated among the ancestors of the people who spoke Yucatec, Chol or Chorti at the time of the Spanish conquest” (Thompson 1950:16). He also noted that all the Ch'olan languages were very close and even the Tzeltalan languages and Chaneabal [Tojolab'al] would be useful especially for comparative purposes. In practice, Thompson (1950:16-17) often offered data on Ch'olan in his writings because he recognized the dearth of information otherwise available for that language family.

However, there were still some who believed that Yukatekan was written on monumental inscriptions in the Northern Peten and Belize (Hofling 1998) or at least at Calakmul (Bricker 1998 pers. com.). Otherwise, evidence for Yukatekan in monumental inscriptions is only present late in the northern part of the Yucatan peninsula (cf. Lacadena and Wichmann 2002). Still, even many of these northern inscriptions are written in the same language as those in the south.

Some such as Lounsbury, who otherwise opted for Ch'olan and Yukatekan, did at one point argue for some signs of early K'iche'an influence on the Classic-Period language (Lounsbury 1997). Justeson and Campbell (1997) have also argued in detail concerning possible evidence of direct Highland influence on the script itself, but they note that these data could be accounted for in other ways. A more likely proposal is Tzeltalan, the predecessor of Tzeltal and Tzotzil. While no one has recently proposed that it was indeed the language written throughout the southern lowlands, at least one scholar, Ayala Falcón (1997) has suggested it as a possibility for Toniná, a site in southern Chiapas. There is no question that Tzeltalan is a language of great importance for epigraphy. Using it as a source has led to important early lexical decipherments such as *ikatz* for “bundle” (Stross 1988) and one of the most common verbs in the inscriptions *uchab'i* (or *ukab'i*) for “govern, take care of, oversee” suggested by Houston in 1996 as reported in Grube and Martin (1998:16). Neither of these words is attested in any of the Colonial or Modern Ch'olan or Yukatekan languages. Even more important is the presence of the Tzeltalan transitive resultative constructions proposed for the Classic-Period texts by Barbara MacLeod (2004) and the intransitive resultative constructions proposed by Michael Carrasco and me (cf. Wald 2004b:243-244; Carrasco 2005:256). An extensive discussion detailing how both of these constructions function in the Classic texts has already been presented in this study (Sections 4.7 and 5.2.4 above). These latter proposals are especially important to keep in mind in the present context since these specific constructions are not present in any of the Colonial or Modern Ch'olan languages, as already argued above in Section 6.4.

Since the early 1980s, most versions of a unified-language hypotheses, if further elaborated, pointed toward a form of Ch'olan (cf. Houston et al. 2000a:Table 1). Already in 1980, Schele (1982:8) noted that "For a number of reasons, some form of early Cholan is accepted by most epigraphers and linguists as the language of the Classic inscriptions . . . Cholan seems to have once been . . . a prestige language." More recently, a proposal has been offered by Houston et al. (2000a) which provides greater specificity and more detail concerning the role of the Ch'olan languages in the Classic Maya texts. Although exceptions have been allowed for at least some of the inscriptions from the northern area of the Yucatan such as Chichen Itzá and for the Codices, even these texts show signs of having been written at least partially in a form of Ch'olan rather than Yucatekan. While approaches that actively pursued Yucatekan as the language of the inscriptions in the Peten and Belizean regions have not been ignored, the amount of phonetic, lexographic, and morphemic evidence in favor of Ch'olan has continued to build (cf. Lacadena and Wichmann [1999] 2002; Wald 2000a; Houston et al. 2000a). Although there are texts written containing Yucatekan phonemes, vocabulary, and verb forms, this has occurred only in some parts of northern Yucatan and in the Codices (cf. Lacadena and Wichmann, 2002; Wald 1994b, 2004a). Ch'olan phonemes, vocabulary, and verb forms, by contrast, were also used in the northern part of the Yucatan and even in the Codices. That the Codices clearly also contain Ch'olan has been argued for the Dresden Codex by Wald (1994b, 2004a) and for the Madrid Codex by Lacadena ([1996] 1998).

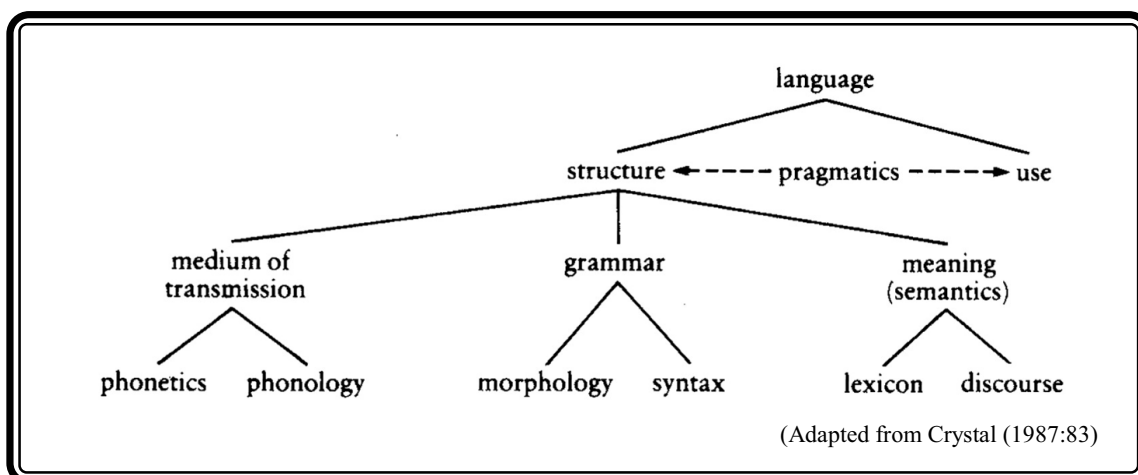


Figure 304. Working Model of Linguistic Levels according to David Crystal (1987)

8.3 Evidence Useful for Maya Classic-Period Script Language Identification

Evidence to aid in identifying a particular language family as one to which the language of the Classic-Period texts belongs can be found at the various linguistic levels categorized in the chart shown earlier but repeated here in Figure 304.³⁴⁷ At the lexical level, distinguishing between languages is theoretically possible but also quite problematic. Lexical evidence can be of at least two types. First, a lexeme may be attested in one possible language source but absent in another. Second, the item may be attested in two possible languages but have a different meaning or set of meanings in each.

However, from a practical standpoint, issues such as borrowing, uneven availability of lexical resources, and close physical or geographical relationships among the various language candidates limit its value for language identification. Lexical distinctions become more important when decisions as to language identification have been made for other reasons. At that point, provisional selection from various meanings of a word may be properly influenced by the closeness of the language source. Despite these limitations, an excellent source for lexical evidence in the Classic Period

³⁴⁷This chart, also included earlier in Section 2.2.11.4, is repeated here for convenience because of its clear and useful delineation of general linguistic levels.

inscriptions comes from the words used for the twenty day names in the 260 divinatory calendar (“*Tzolk’in*”) and the nineteen “month” names in the 365 solar calendar (“*Haab*”). Studies such as those by Campbell (1984), Justeson et al (1985), and Grube (1990) reveal that many of these names and the glyphs that were used to write them had their origins in the lexicon of the southern Ch’olan-speaking lowlands and not in that of the northern Yukatekan-speaking lowland areas of the Yucatan peninsula.

At the phonetic and phonological levels, the history of various sound changes is more important for ruling certain languages in or out as possibilities (cf. Justeson et al. 1985; Campbell 1984; Kaufman and Norman 1984; Wald 1994a, 1994b, 2004a; Lacadena 1996; Houston et al. 2000a; etc.). One possible limit on its value can come from lexical borrowing from a language that has not undergone a particular sound change. A well-known example is *kab’* versus *chab’* for “earth, town” which is attested in Chontal and Morán’s Ch’olti’. Such problems are relatively minor, since the majority of words affected by sound changes would still reflect the sound change despite its absence in particular words. Also, since we are dealing with a written language, the possibility of maintaining outdated written forms must always be taken into account. English written script, for example, provides many examples of words currently not pronounced the way they are written phonetically. Although not alphabetic, the Classic Maya logosyllabic system provides some of the same opportunities. Although there is good evidence to rule out most alternative pronunciations of syllabic glyphs (syllabograms), logographic glyphs allow such variation. However, the incidence of unmarked variation in the value of logograms has been greatly overestimated in the past. Overall, the problems stemming from possible multiple values of logograms are not critical. As has been argued in Section 2.2.8.3, such variation is quite limited, sometimes accompanied by phonetic complementation, and in most cases amenable to convincing practical explanations.

Difficulties in pinpointing the actual timing of some of the sound shifts may affect the usefulness of such evidence. One possible example is the shift in Yukatekan from /t/ to /ch/ which is evident at some northern Yucatan sites (cf. Lacadena and Wichmann

2002). Whenever it is uncertain whether a specific sound change had already occurred at a specific time or place, the value of that sound-change evidence for purposes of language identification could be called into question. Nevertheless, as part of a pool of relevant data, sound change evidence plays a very important role and such evidence carries greater weight than purely lexical data whose content does not happen to carry any relevant evidence concerning sound changes.

Although morphology has generally not been explicitly dismissed as unimportant, emphasis upon verbal morphology to determine the identity of the languages represented in the hieroglyphic script has been a relatively recent development. In 1982, Linda Schele published the results of her dissertation as *Maya Glyphs: The Verbs*. It included many of the glyph blocks that had been identified as verbs by her and others up to that time. It was arranged and cross referenced by specific glyphic affixes. This was followed in the mid 1980s by a number of publications that investigated the possible derivational and inflectional equivalents in the Ch'olan and Yucatekan languages. These included a reconstruction of the Proto-Ch'olan verbal system by Kaufman and Norman (1984: 78) undertaken with a studied methodological independence from any epigraphical findings. MacLeod ([1983] 1987) provided a handbook of possible affixes in Colonial and Modern Ch'olan and Yucatekan languages along with some proposals concerning their equivalents in the hieroglyphic script. Bricker (1986) continued along these lines by including tables of morphological affixes for both the Ch'olan and Yucatekan languages. She, however, went even further in attempting to recreate a more comprehensive and systematic outline of the language represented in the Maya hieroglyphic script. Although it perhaps went a little too far in its tendency to recreate a language reflecting both Yucatekan and Ch'olan verbal morphology (cf. Wald 1994b, 2004a:28-29) and attempted to do so before certain key syllabic glyphs had been securely deciphered, it represented a very important step forward and is still useful.

With added attention being paid to verbal morphology, it soon became even more evident that the Ch'olan language family played the central role in the Classic Maya

script. Some of the verb forms that were identified pointed directly toward the Ch'olan language family. Among these were the positionals in *-wan*, the passives in *-hC-aj*, and the passive of derived transitives in *-n-aj*, noted by MacLeod (1984, 1987). Another important Ch'olan suffix noted early on was the intransitive suffix *-Vy*, recognized as a mediopassive intransitive in the Classic texts by MacLeod (pers. com.). The presence of the *b'u* positional transitive/causative was identified independently by Houston, Grube, and MacLeod. Bricker (1986) identified a *-Vw* or *-V_Iw* transitive incomplete related to Tojolab'al. Later, Wald (1994a) proposed that the glyphic **wa** suffix wrote the historical equivalent of the Ch'olti' and Ch'ol harmonic transitive completive markers in *-V_I*. While there were many important identifications of other verb forms over the last twenty years or so, these are significant here because they have played an important relatively early role in linking the language of the Classic-Period texts specifically to the Ch'olan language family.

8.4 “Classic Ch'olti'an” Language Hypothesis of Houston et al.

8.4.1 Claim: Only Immediate Direct Descendant is Ch'olti'-Ch'orti'

In a more recent proposal, Houston et al. (2000a) have gone beyond the debate over whether there are any convincing signs of the Ch'olan languages in the texts of the Classic Period. Instead, they argue that the language written in during the Classic Period, including most of the texts from northern Yucatan, was an immediate ancestor of Ch'olti', which was in turn the Colonial-Period precursor to Modern Ch'orti'. To propose that Ch'olti' was a descendant of the language written in the Classic Period is hardly problematic since that has been accepted by most epigraphers for some time, as just noted.

The broader claim of Houston et al. (2000a) concerning Ch'olti' is that, of the Ch'olan languages, the verb morphology of Ch'olti' is overall the closest to that of the Classic Period texts. This view is also quite defensible and has been held by others as well. Though perhaps too general a statement to be meaningful without specifics, I

would agree with it in general terms as well, despite some reservations and problems that will be pointed out later. However, their new proposal goes even further beyond that claim.

Can we best approach ancient Maya inscriptions through specific and attested descendant languages within these families? We answer this last question with a strong affirmative and present evidence that Classic Maya inscriptions, composed in the six centuries between about A.D. 250 and 850, convey a single, coherent prestige language ancestral to the so-called Eastern Ch'olan languages – the historically attested Ch'olti' language and its descendant, modern Ch'orti'. (Houston et al. 2000a:322)

Agreeing with their proposal also entails accepting a newly revised timetable for the creation of the whole Ch'olan family, with Ch'ol and Chontal splitting before the advent of Classic Maya writing (Stuart et al. 1999a:5-8; Houston et al. 2000a; Robertson 1998). They conclude that at that early time, surely before about A.D. 250, the Ch'olan family had split into the three currently recognized languages, Chontal, Ch'ol, and Ch'olti'-Ch'orti'. What is more, they deny any direct involvement of the first two languages in the script. If any involvement of Ch'ol or Chontal took place, it would have been at the level of a borrowing from a separate “vernacular.” One example they bring is the positional suffix *-wan* (*-waan*). They propose that *-wan* had to “seep’ into the high script” after “it originated in Acalan Chontal and swept up the Usumacinta Basin during the height of the Classic period” (Houston et al. 2000a:336), or that “it percolated into glyphic discourse in Chontal speaking areas” (Houston et al. 2000a:333; see also Stuart et al. 1999b:5-6; Hruby and Child 2004).

Further, according to their theory, neither Chontal nor Ch'ol stand as descendants of the language written on the monuments or painted on vases or in books. Nor were any of the extant inscriptions written in the forerunners of these languages. They set out to

demonstrate that the only direct descendant of the Ch'olan language in which the Classic-Period texts were written could have been Colonial Ch'olti'. Coupled with Robertson's (1992:169, 1998:5) view that Ch'orti' is simply the modern version of Ch'olti', that then leaves Ch'orti' as the only currently extant Ch'olan language that is a direct descendant of the language of the Classic Maya script.³⁴⁸ It is not surprising then to learn the name they give to the language of the Classic-Period script: "We term this language 'Classic Ch'olti'an' and present the evidence for its explicable historical configuration and ancestral affiliation with Eastern Ch'olan languages (Ch'olti' and its still-viable descendant, Ch'orti')" (Houston et al 2000a:321).

Although the new hypothesis of Houston et al. (2000a) allows for the possibility that people speaking the forerunners of Ch'ol and Chontal may have written hieroglyphic inscriptions, they did so only in a required "high," "prestige language" or "lingua franca," which was "Classic Ch'olti'an," and not in their own "low" languages which had split from Ch'olti'an hundreds of years earlier (cf. Houston et al. 2000a:335). Only occasionally would the "vernacular" "percolate" or "seep" into the text. Other possible differences present in the texts are characterized as, at most, differences in dialect, that is, dialects of Ch'olti'an, not of Ch'olan. From the standpoint of Houston et al., the differences are no greater than those which might exist in the same language (Ch'olti'-Ch'orti') over an extended period of time.

The appropriateness of applying a "lingua franca" hypothesis and related issues to the language of the Classic-Period texts will be addressed in Section 9. Here, issues of a different sort will be discussed. Their argument favoring a "Classic Ch'olti'an"

³⁴⁸Note that there are two quite different claims made both in the Houston et al. (2000a) article and in the Robertson (1998) article. In both, the two claims are made in the very same sentences. In the former case, Houston et al. (2000a:334), the authors state that "Ch'orti's colonial ancestor is Ch'olti' or at least a dialect close to it." In the latter (Robertson 1998:5), "The data presented here suggest that minimally, Ch'orti' is the modern descendent of Ch'olti'; or, at most, that ancestral Ch'olti'[sic, Ch'orti?]' and Ch'olti' were mere dialects of each other" In each case, I disagree with the hypothesis that Ch'orti' is a direct descendant of Ch'olti', but have little problem agreeing that Ch'orti's ancestor was a dialect of Eastern Ch'olan or at least a very closely related sister language of Ch'olti'. This will be discussed later in more detail. In both cases the actual argument being made by the authors seems to depend upon Ch'olti''s being a **direct ancestor** of Ch'orti' and **not just a sister language** or even a dialect of it.

designation is based mainly upon certain similarities between the bulk of the inscriptions and the Ch'olti' and Ch'orti' languages. Substantial questions are not likely to arise concerning the similarity of Ch'olti' and Ch'orti' to Classic Ch'olan. But it may be more difficult to defend the assumption that this similarity can only be accounted for by ruling out any major participation by the ancestors of current Ch'ol and Chontal speakers unless they used a language other than their own. Although there are some very important lexical and grammatical features which are attested only in Ch'olti' and Ch'orti', there are also a number of such features that are now attested only in either Ch'ol or Chontal as noted for example by Josserand (1991) and Wald (1998b, 2000a, 2004b). What is more, there are important lexical and grammatical features in the language of the Classic-Period script that are only present in Tzeltal and Tzotzil, for example, as noted in detail above, both transitive and intransitive resultative aspectual morphemes. Yet the absence of these two constructions in all of the Ch'olan languages does not require the conclusion that the texts could only have been written in Tzeltalan. Neither does it rule out the participation of the ancestor of all of the Ch'olan languages in writing the texts of the Classic-Period.

Houston et al. (2000a) stress two morphemes present in Ch'olti' and Ch'orti' that are not in evidence in the other Ch'olan languages. The other Colonial and Modern Ch'olan languages preserve some characteristics of the writing system no longer evident in either Colonial Ch'olti' or Modern Ch'orti'. Especially Chontal arguably provides evidence of critical elements important at a lexical, morphological, and discourse level of the written language that are no longer present in either of them. After presentation of some evidence of this to him in 1997 (cf. Wald 1998b), Robertson (1998:10) modified somewhat his new placement of Chontal in the Ch'olan family tree. In his modified view, Chontal separated later from the Ch'olti'-Ch'orti' branch than did Ch'ol or is at least somehow closer to Ch'olti'.³⁴⁹ However, Robertson still does not allow for the direct participation of Chontal's predecessor language in the writing of the Classic Period.

³⁴⁹This occurs in a footnote in Houston et al. (2000a:322) "In some respects, Acalan Chontal (the colonial-era form of Chontal) is closer to Ch'olti' than to Ch'ol, with which it is usually grouped (as "Western")."

TABLE 5
Comparative Data on Verbal Categories

Language	Positional	Intransitive Positional	Passive
*Common Mayan	*-V ₁ l/-an	*-er/-h-	*-ax-
*Common Wasteko-Ch'olan	*-V ₁ l/-an	*-V ₁ y/-h- . . .-aj	*-h-
*Common Ch'olan	*-V ₁ l	*-V ₁ y/-h- . . .-aj	*-h-
Classic Ch'olti'an	-V ₁ l	-wan [late]/-laj	-h-? . . .aj
Ch'olti'	-V ₁ l	-uan	-h- . . .-aj
Ch'orti'	-V ₁ r	-wan	-h- . . .-aj
Acalán (Classical Chontal)	-V ₁ l	-van	?
Ch'ol	-V ₁ l	-tāl [-wān]	-h- . . .el
*Common Tzeltal-Tzotzil	*-V ₁ l	*-V ₁ y/-h- . . .-aj	-ot
Tzendal	-V ₁ l	*-V ₁ y	-ot
Tzeltal	-V ₁ l	-h- . . .-ah	-ot
Tzotzil	-V ₁ l	-í	-at
Tojolab'al	-an	-an	-(a)h
*Common Q'anjob'alan	*-an	*-Vy	*-l
Q'anjob'al	-an	-a'	-le
Akatek	-an	-na(dv)	-l-
*Common Mamean-K'iche'an	*-V ₁ l/-an	*-e:'	*-h-
Kaqchikel	-V ₁ l/-an	-e'	*-Vh- > -V:
Poqomchi'	-l	CV-h-C	Vr/-j/-h-
Sakapultek	-V ₁ l	-V ₁ b'	-l/-b'
Mam	-l/č	-e:'/CV:C-et	-et
Tektitek	-l/č	-l-et	-et
Awakatek	-l	-e:'	-l
Ixil	-l-éle	-[a,e]b'	-ax

(Adapted from Houston et al. (2000a:331))

Figure 305. Comparative verb-suffix data adapted with one category elision and one addition to Ch'ol data (in brackets) from Houston et al. (2000a)

8.4.2 Summary of Houston et al.'s Argument for Ch'olti' Only

I will not attempt to both review in detail and reassess all the reconstructions presented by Houston et al. Doing so would lead too far astray from the topic of this dissertation. Still, in some cases, certain concerns about some of them will be expressed in what follows. What will, however, be reviewed in detail and commented on are the conclusions Houston et al. draw from those reconstructions for their placement of Ch'ol and Chontal compared to the language of the Classic-Period texts.

In order to understand the proposals made by Houston et al. (2000a), it will be very useful to reproduce here a table and a figure from their article entitled *The Language of the Classic Maya Inscriptions*. Their Table 5 is reproduced here in Figure 305, modified by the removal of one column unrelated to this whole discussion. This table contains some of the linguistic raw material which they used to recreate both the

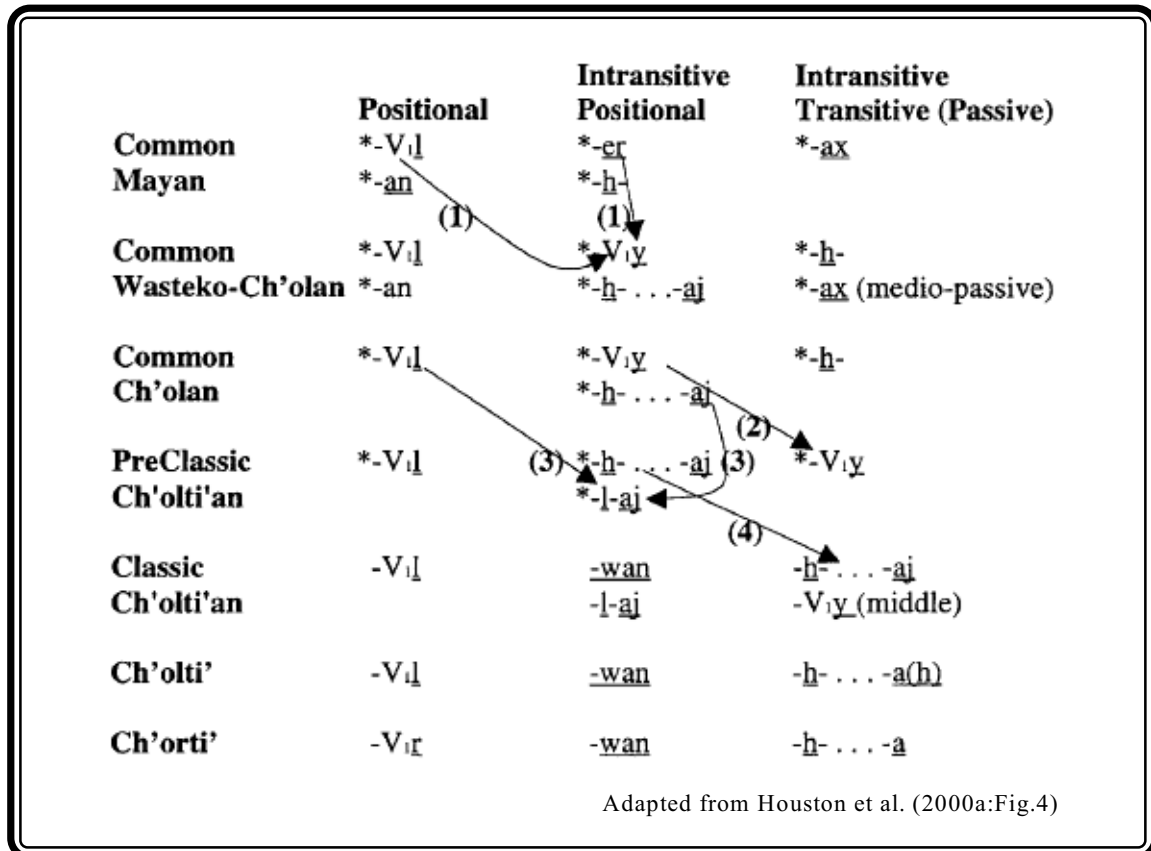


Figure 306. Reproduction of Houston et al.'s (2000a:332) Table entitled "Chronological overview of changes from Common Mayan to Ch'orti'"

reconstructions at the top of the table itself and the further reconstructions in their Figure 4, which is here reproduced as Figure 306. I have corrected one of the entries in their Table 5 by adding the correct information on the Ch'ol intransitive positional form in brackets. Their original Table had instead the incompletive form (also still shown) – an error which made Ch'ol seem even more like "an outlier" than they likely intended (cf.

Houston et al. 2000a:322). Figure 306 is an exact reproduction of their chart which includes the data for an additional reconstructed language, “PreClassic Ch’olti’an,” and also indicates paths of “chain displacement” (cf. Robertson 1992:41-44) for several “markers” or morphological forms important to Houston et al.’s arguments.

Most of their rationale for naming the language of the Classic-Period Maya inscriptions “Classic Ch’olti’an” and for limiting descendants of that language to Ch’olti’ and Ch’orti’ center around two derivational forms present in them. The first is the frequently occurring form in $-V_{ly}$ (or $-VV_{ly}$), which is spelled with the final vowel of the root and a syllabic **yi** sign when the root is written syllabically or simply with **yi** when the root is written logographically. The other is the passive form in $-hC-aj$, their $-h-...-aj$. When the root is written syllabically, this passive thematic is usually spelled **Ca-ja**, or **Ca-ji-** when the stem also has the adverbial enclitic $-ijiiy \approx -iiy$ attached. When the root is written logographically, the passive thematic is usually spelled with a **ja** or **ji** sign depending again upon whether it is followed by the adverbial enclitic $-ijiiy \approx -iiy$. The infix $-h-$ of the passive morpheme is **never** written in the script.³⁵⁰ It is recreated in transcriptions based upon comparative linguistic arguments. As will soon be explained, the trajectory of these two morphological forms cause them to interact diachronically with each other in several languages as shown by the arrows in Figure 306.

The argument for the sole participation of ancestral Ch’olti’ and Ch’orti’ in Classic Ch’olan is based upon the $-V_{ly}$ mediopassive diagramed in Figure 306 and is roughly as follows. First, only the eastern Ch’olan languages attest a mediopassive intransitive in $-V_{ly}$. This morpheme descended from a $-V_{ly}$ intransitive positional morphological suffix in Common Wasteko-Ch’olan and before that from a combination

³⁵⁰Some epigraphers contend that it is sometimes written when the logographic sign for **NAH** instead of **na** is occasionally used to write passive forms of words beginning with *na-*. I find that this is only apparent or coincidental, and is due instead to the T4 sign sometimes being used as a syllable for **na** rather than as a logogram **NAH**. First, T4 also occurs in other words for which the consonant /h/ cannot be justified. Second, other passive forms beginning with syllables for which a different CVH logogram would also be available, never occur written with those logograms. Concerning the lack of preconsonantal infix */h/* see also Lacadena (2004:176-79.) and Lacadena and Wichmann (2004:123-126). I disagree with Lacadena in this regard only concerning the **NAH-wa-ja** *nahwaj* proposal he attributes to personal communication with Marc Zender.

of Common Mayan *-*er* and the *-*V_ll* of the adjectival positional form. Next, both -*V_ly* and -*h...-aj* are reconstructed as intransitive positional markers in Common Wasteko-Ch'olan, Common Ch'olan, and Common Tzeltal-Tzotzil. Important for those reconstructions seem to be the -*V_ly* in Tzendal (Colonial Tzeltal) and the -*h...-aj* in Modern Tzeltal.

In order to get this duet of -*V_ly* and -*h...-aj* as intransitive positionals in Common Wasteko-Ch'olan and Common Ch'olan to both become passives and then, in turn, to become mediopassive and passive markers respectively in "Classic Ch'olti'an," Houston et al. reconstruct another intermediate language called "PreClassic Ch'olti'an." This allows -*V_ly* to become a passive while -*h...-aj* remains an intransitive positional. Next, in "Classic Ch'olti'an," -*h...-aj* becomes a passive and pushes the previous passive suffix -*V_ly* into a mediopassive position.³⁵¹

Parallel to these historical developments argued by Houston et al. for -*V_ly*, they propose that -*h...-aj* is undergoing a diachronic development of its own. Houston et al. reconstruct a passive in -*h-* without the -*aj* for Common Wasteko-Ch'olan. They also reconstruct the same -*h-* for Common Ch'olan as had also been done earlier for Proto-Ch'olan by Kaufman and Norman (1984:109). However, at this point, Houston et al. do not suggest that the Classic language's passive in -*h-* simply adds an -*aj* thematic suffix for derived intransitives which would seem to be implied by Kaufman and Norman's analysis of Eastern Ch'olan (1984:108). Houston et al. have instead reconstructed two intransitive positionals for Common Ch'olan. They have moved one of them, -*V_ly*, to the PreClassic Ch'olti'an passive slot, as already noted above. In the meantime, Houston et al. also reconstruct an intransitive positional in -*h...-aj* for Common Wasteko-Ch'olan which they also propose carried over as such into Common Ch'olan and even into their newly reconstructed Pre-Classic Ch'olti'an. In their view, Pre-Classic Ch'olti'an held

³⁵¹Note that I have argued earlier in Section 3.3.2 that -*VV_ly* was in the process of becoming an intransitive marker for a change-of-state set of verbs after the Classic Period with signs of the ongoing process still present in Colonial Ch'olti'. There may have also been vague hints of the beginning of this process during the Classic Period but possible evidence of it would have been limited to one or two intransitive verbs.

this *-h-...-aj* in abeyance while at the same time developing a new intransitive positional in *-l-aj* and providing a time slot for the Common Ch'olan *-V_Ly* positional to become a passive. It was then in Classic Ch'olti'an, according to their previous reconstructions, that this *-h-...-aj* became the new passive rather than the alternative of allowing the previous *-h-* passive to take on the *-aj* thematic suffix for derived intransitives. Finally, they propose that it was this *-h-...-aj*, which by becoming a passive in Classic Ch'olan, drove the *-V_Ly* suffix into the mediopassive slot. The old *-h-* passive, in their view, never appeared in the Ch'olti'an picture and is seen today only in Ch'ol which, they propose, preserved it from the earlier *-h-* passive instead of arriving at it by simply dropping the final *-aj* thematic from the Classic-Period form.

8.4.3 Alternative Analysis of Data

The last section presented the line of reasoning that Houston et al. use to rule out any participation at all in the Classic script by the linguistic ancestors of Ch'ol and Chontal. There are, to be sure, no obvious signs of a *-V_Ly* mediopassive or intransitive derivational suffix or status marker in either of these two languages even if one includes Acalan Chontal. Ch'ol has a passive in *-h-* but it does not include the thematic *-aj* suffix present in Classic Ch'olan or the modified *-a* version of it attested in Ch'olti' and Ch'orti'. These data are not in dispute here.

What is open to question is the exclusion of other reasonable explanations for the lack of a *-V_Ly* reflex in Ch'ol and Chontal, the lack of an *-h-...-aj* (*-Vh-aj*) passive in Chontal and the lack of an *-aj* thematic on the passive in Ch'ol. For example, why would the apparent lack of a related *-V_Ly* suffix exclude those languages from Classic Ch'olan although attesting a *-V_Ly* suffix is not used to exclude them from Greater Tzeltalan since it too attests a *-V_Ly* suffix? Indeed, Robertson et al. reconstruct a *-V_Ly* suffix under the rubric Common Wasteko-Ch'olan without excluding either Ch'ol or Chontal, neither of which has preserved a reflex of that suffix.

Similar questions could be asked about the absence of the *-h-...-aj* passive in Chontal and why the presence of a shorter version of the passive in Ch'ol, *-h-*, actually *-h-...le* in the completive, must be linked to a source completely unconnected with the *-h-C-a* of Eastern Ch'olan?

There are actually several different issues involved in the claims that are made by Houston et al. that have to be sorted out and evaluated separately. The following quote from Houston et al. (2000a) contains a capsulized summary of what they state should be emphasized concerning their analysis of why only Ch'olti' and Ch'orti' are the direct descendants of the language of the Classic-Period texts and Ch'ol and Chontal are not.

One point deserves emphasis. The Classic Ch'olti'an lineage differs substantially from both Ch'ol and Chontal, the other two Ch'olan languages. Simply put, Ch'ol morphology does not accord with Classic Ch'olti'an in the same way that the Ch'olti'an lineage does, since Ch'ol preserves the Common Ch'olan passive **-h-*, whereas Ch'olti'an has innovated. Chontal does not preserve the Common Ch'olan **-h-* (it uses the suffix *-k-*), but it certainly has no evidence of the *-h-...-aj* passive or anything like the *-V_{ly}* middle voice. It simply is not plausible that, within the time since Common Ch'olan, Chontal could have gone through **-h-*, **-V_{ly}*, and **-h-...-aj* to end up with *-k-*, leaving no vestige of any of the earlier passives. Furthermore, no other Mayan language has, for example, lexical items such as *pul-uy*, “to burn,” or *pakxi* “to return,” which continue through time in all three Ch'olti'an languages. These examples are a part of the fingerprint that identifies Ch'olti'an as inclusive of Classic Ch'olti'an, Ch'olti', and Ch'orti' but exclusive of Ch'ol and Chontal. (Houston et al. (2000a:333)

8.4.3.1 Lexical Item Purportedly Unique to “Ch'olti'an”: *puluy*

In sorting out these claims and evaluating them, let us start first with the last stated in this passage. The two “lexical items” that are presented, *pul-uy* “to burn,” and

pakxi “to return,” are not important as unique words because these do indeed exist in other Mayan and Ch’olan languages. As a lexeme, *pul* is attested in all of the Ch’olan languages, including those excluded by Houston et al. So they must be referring to the whole form *puluy* including the suffix *-uy* when making this statement. To that extent, this reference to a “lexical item” is no different from the previous mention of the *-V_Ly* suffix and its absence in Ch’ol and Chontal. But it should also be noted that the analysis of this form is **not the same in all of the so called “Ch’olti’an” languages**. Detailed evidence of this has already been presented in Section 3.3.2.3 above. The root *pul* “to burn” is transitive in Ch’ol, Acalan Chontal, Modern Chontal, and Ch’olti’. It is, however, an intransitive root in Ch’orti’. Thus one cannot correctly claim that the form *puluy* has continued with the same meaning “through time in all three Ch’olti’an languages.” After all, it is important to note that most of the arguments made by Houston et al. are centered upon forms that keep the same shape but **change in function and meaning** over time. That is precisely what has happened in the case of *pul*, *puluy*, and *-V_Ly*.

This difference in function and meaning is most evident in the case of the root *pul*. Because it was a transitive root, it could take a mediopassive suffix in Classic Ch’olan and Ch’olti’. Morán interprets *puluy* as a passive in Ch’olti’ since he did not distinguish clearly between passives and mediopassives. But, in either case, the stem would have to be transitive to take a mediopassive suffix while retaining a mediopassive meaning. In Ch’orti’ *pur* (or *b’ur*) is a root intransitive verb meaning “to burn” and so takes one of the intransitive thematic suffixes, *-uy*. The suffix *-uy* is not a mediopassive suffix in Ch’orti’ and so cannot be used on transitive verbs. Evidence for this change in the interpretation of *pur* is also provided by the presence of other roots in Ch’orti’ which took the *-V_Ly* mediopassive suffix in Classic-Period texts and which now take different mediopassive suffixes. They were not reinterpreted as intransitive roots and so cannot and do not take the *-V_Ly* intransitive thematic suffix in Ch’orti’.³⁵²

³⁵²As noted in the earlier discussion of this and other *-V_Ly* forms in Ch’orti’, reference should also
(continued...)

8.4.3.2 Lexical Item Purportedly Unique to “Ch’olti’an”: *pakxi*

The second of the “lexical items” they choose as prime examples for demonstrating their interpretation of the data is *pakxi* “to return.” Elsewhere in the same article Houston et al. (2000a:329) suggest that

Classic Ch’olti’an probably preserved the declarative **-ik* as *-i*. Intransitive verbs and other single-argument predicates . . . display glyphic spellings with root + *i* . . . A similar pattern occurs with positionals using *-wan* (**CHUM-[mu]- wa-ni** > *chum- wan-i*), an antipassive form detected by Lacadena (1998 [2000a]; **CH’AM-wi** > *ch’am- w-i*), and a distinctively Ch’olti’ verb detected at Naj Tunich by Barbara MacLeod (**pa-ka-xi** > *pak-x-i*; MacLeod and Stone 199[5]:178; Morán 1935[a]:21). . . . By the time Ch’olti’ and Ch’orti’ were in use, the particle had disappeared altogether.

First, Kaufman and Norman’s (1984:104) interpretation of the Ch’olti’ *-i* in *pakxiel/pakxi* and other similar examples as a thematic suffix for derived intransitives appears to be more accurate for the reasons they provide. It is also not clear what Houston et al. mean by stating that, “By the time Ch’olti’ and Ch’orti’ were in use the *-i* particle had disappeared altogether,” since they explicitly reference Colonial Ch’olti’ for *pakxi*. Pointing out their problematic analysis of the origin and interpretation of this suffix is important for the present purposes mainly to the extent that it also provides an additional justification for calling into question their interpretation and transcription of the *i* in glyphic **CH’AM-wi** and **pa-ka-xi**.

In the case of the **wi** and **wa** syllabic glyphs present in examples such as **CH’AM-wi** and **CH’AM-wa**, Lacadena (2000:163) says “I would suggest a form *-(V)w*.” for the

³⁵²(...continued)

be made to the excellent, as-yet-unpublished summary of Ch’orti’ grammar by Søren Wichmann (1999).

shape of the actual morphemes being written. Of the possibilities, Lacadena (2000:171,177) suggested either *-ow* or *-aw* as the most likely. He does not suggest *-wi*.

In an observation that provides glyphic evidence against the transcription of this morpheme as *-wi*, I have noted elsewhere (Wald and Carrasco 2004b) that in the name of a well-known ruler of Naranjo, *K'ahk' Tiliw Chan Chaahk*, the antipassive *tiliw* “burn, ignite” can be written glyphically as either **ti-li-wi** as on Naranjo Stela 30 and elsewhere or **ti-li-wa** as on the “Regal Rabbit Vase” (K1398) both of which are shown in Figure 307. Spellings in names are

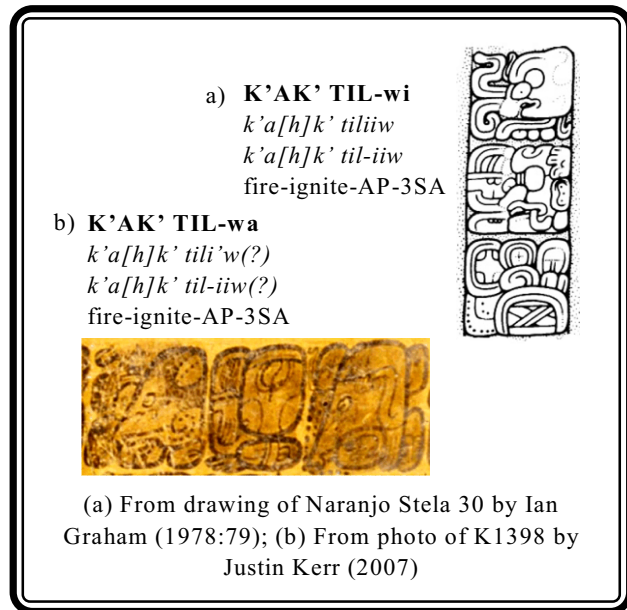


Figure 307. Alternate spellings of *k'ahk' tiliw*, a Naranjo ruler's name

especially important in this regard since their actual intended pronunciation is not likely to change in different texts.³⁵³ However, in this case there may be minor variation between *Tiliw* and *Tili'w*. Earlier in Section 3.2.1, an example was also given of the root transitive verb **'u-CHOK-wi** *uchokoow* or *uchoko'w* with the root transitive marker written with a **wi** instead of a **wa** apparently without any change in meaning or function. Whether a change in transcription was intended is not certain. Theoretically, the change from the sign **wa** to **wi** could signal a different spelling, that is, as *uchokoow* instead of *uchoko'w*.

Figure 308 shows two examples of the word in question. Besides the epigraphical evidence, an excellent linguistic case can be made that just as for antipassives and root transitives, the verb in question here is also to be transcribed as *pakax*, or perhaps as

³⁵³ Scribes often go out of their way to ensure that names that do not conform to current pronunciation are marked to indicate the correct transcription as for example in the name of the Palenque ruler *Kan B'ahlam* III, the son of *Janaab' Pakal* I (for example, on the Emiliano Zapata panel).

paka'x and *pakaax* depending upon the vowel of the final syllable. The Naj Tunich examples were noted by Stuart (1987:31) and read as *pakxi* by MacLeod on the Naj Tunich paintings numbered 19, 48, and 65. She suggested then that “The Cholti word may be further analyzed as *pak* “fold” and **xi* “go” (to “fold-go” is to “double back”)” (MacLeod and Stone 1994:178).

Houston et al. seem to base their conclusions instead on the theory that the final /i/ of Ch’olti’ *pakxi* is related to the Proto-Mayan *-*ik* intransitive status marker. Instead, I would dispute the relevance of Houston et al.’s advice that “no other Mayan language has, for example, lexical items such as . . . *pakxi*

“to return,” and turn to another closely related Mayan language for guidance. The Colonial Tzotzil of Santo Domingo Zinacantán (Laughlin 1988) has, just as has Classic Ch’olan, retained examples of the derivational suffix *-ax* which Houston et al., among others, reconstruct as a passive suffix for Common Mayan and a mediopassive suffix for Common Wasteko-Ch’olan (see Figure 306 above). Indeed, it is a middle voice (mediopassive) suffix in Tojolab’al as well (Furbee-Losee 1976:140). That is its likely usage in both Classic Ch’olan and Colonial Tzotzil.

The Spanish author’s entry for Colonial Tzotzil is “tornar de do[nde] fuiste, *xepacax*” “return from where you went” (Laughlin 1988:1105). Laughlin (1988:278) precedes his entry for this word with an asterisk because he is not sure of the spelling but

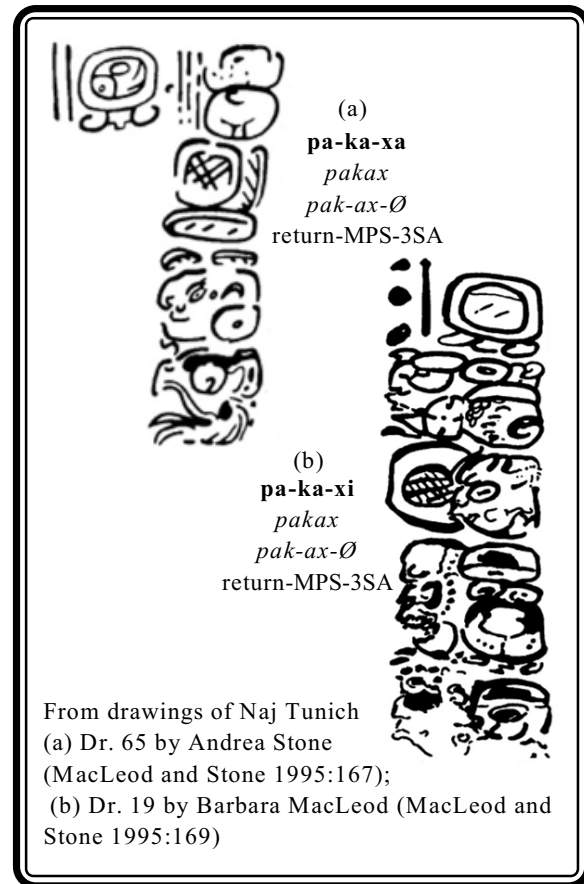


Figure 308. Mediopassive suffix *-ax* on verbs at Naj Tunich

there is no doubt that the Friar was right even if the suffix is no longer productive in Tzotzil. So the mediopassive or middle-voice form, *pakax*, is also written on the Naj Tunich walls using two different glyphic spellings, **pa-ka-xa** > *pakax* or *paka'x* and **pa-ka-xi** > *pakax* or *pakaax*. Just as with the **ti-li-wa** and **ti-li-wi** examples of *tiliw* or *tili'w*, both forms can be used to spell *pakax* “return” or write different versions of the same suffix.³⁵⁴ I also propose that the *pakxi* and *pakxiel* forms in Ch’olti’ are reflexes of this same *pakax* form and not a verb-plus-verb compound as earlier suggested by MacLeod (MacLeod and Stone 1994:178). Because of the addition of the *-i* thematic suffix in Ch’olti’, the second /a/ of *pakax* is elided leaving the form *pakxi*. It is likely also related to the Ch’orti’ intransitive verbs “*pakaxen* vi. *apakax*, *pakax* ‘Ir al pueblo’” (Pérez Martinez et al. 1996:162) and “*pakaxi* ‘go on a walk, walk around in the town, walk to the town’” (Hull 2005:92).

The added *-i* on some forms in both Ch’olti’ and Ch’orti’ is simply the common *-i* thematic suffix that is characteristic of both of these languages but is not present as such in Classic Ch’olan. As noted by Sattler (2004:378), there are other words in Ch’olti’ that are attested with this same suffix, among which she notes *tokxiel* “tropesar,” *kaxiel* “caer” and probably *saksiel* “amanecer.” She clearly considers the *-x-* to be a “middle voice” derivational suffix with the *-i* being a “theme vowel.” As we shall see later, Kaufman and Norman (1984:104) consider the retention of the /i/ in the incompletive forms, as in *pakxiel*, to be a clear sign that it is a thematic suffix.

In Colonial Tzotzil, this *-ax* suffix seems to have survived only in a few words causing it not to be securely recognized as such by Laughlin. It seems to have been more common in Ch’olti’ but less so in Ch’orti’. There are several other examples of this mediopassive suffix on different roots in the Classic Ch’olan texts, for example, at Palenque on the Tablet of the Cross (*ch’amax*) and at Copán on Stela J (*makax*). The

³⁵⁴ As already noted briefly, these may represent two different spellings of the word. That in **xa** may spell the form with a short vowel as *pakax* or with a glottal stop as *paka'x*. The other in **xi** may write the form with a long vowel as *pakaax*. I have generally but provisionally adopted the spelling rules proposed by Houston et al. (1998) and refined and expanded by Lacadena and Wichmann (2004). In this particular case, I will generally use the short form of the vowel *a* as in *-ax* to spell this suffix until further research into its history can be completed.

Tzotzil entry matches the Classic Ch'olan examples exactly while in Ch'olti' a thematic *-i* suffix has been added. If the Ch'orti' entries represent the same word and suffix, it is also a very close match. This evidence indicates that the **i** on the form **pa-ka-xi** > *pakax* in Classic Ch'olan is not a part of the mediopassive form, is not to be transcribed, and so is unrelated to the *i* thematic in Ch'olti'. What is certain from this evidence, is that *pakax* and its forms are not an indication that the Classic-Period texts exclude even Tzotzil, much less Ch'ol and Chontal, as Houston et al. seem to imply.

8.4.3.3 Claim: Chontal Ruled Out as Descendant of Classic Ch'olan

We still have left to discuss two features mentioned by Houston et al. (2000a:333) as “a part of the fingerprint that identifies Ch'olti'an as inclusive of ‘Classic Ch'olti'an,’ Ch'olti', and Ch'orti' but exclusive of Ch'ol and Chontal.” The first two were billed as “lexical items,” but really turned out to be morphological examples in disguise. Turning now to two more morphological items, we will look first at the argument against the possibility of the ancestor of Chontal being involved in the language of the Classic texts. It is reduced for Houston et al. (2000a:333) to the absence of two morphological forms:

Chontal does not preserve the Common Ch'olan **-h-* (it uses the suffix *-k-*), but it certainly has no evidence of the *-h-...-aj* passive or anything like the *-V_{ly}* middle voice.

Surely Houston et al. do not wish to imply that the absence of two morphemes is enough to rule out a language as a descendant when there is a space of almost exactly 700 years between it and its ancestor Classic Ch'olan. What is more, this 700 years was punctuated by at least two cataclysmic events, the breakup and virtual abandonment of the Southern Lowland polities and the invasion of the Yucatan Peninsula by the Spaniards, which included the ordered and documented displacement of those very Acalan Chontal people as described in the *Paxbolon-Maldonado Papers*. A more

detailed review of those events themselves and the possible and documented linguistic effects of such events will have to wait until another time.

Indeed, what Houston et al. claim goes even beyond the impossibility of losing two morphemes in 700 years. As they directly state:

It simply is not plausible that, within the time since Common Ch'olan, Chontal could have gone through **-h-*, **-V_{LY}*, and **-h-. . .-aj* to end up with *-k-*, leaving no vestige of any of the earlier passives. (Houston et al. 2000a:333)

In this statement, Houston et al. are referring to these three not simply as morphemes, but as morphemes representing markers of the passive. They are claiming then, that Chontal could not have gone through these three passive markers and ended up with a fourth in the approximately 1300 to 1500 years from when they date the split among the three Ch'olan language family members Ch'ol, Chontal, and Ch'olti'.

Even taking their claim at face value, I fail to see why that would not be plausible. However, the way the situation for Chontal is presented is quite misleading. If their whole theory is right, by the time of Classic Period inscriptions, the **-h-* passive of their Common Ch'olan and the **-V_{LY}* passive of their "PreClassic Ch'olti'an" were no longer in use. That means that within the span of about 200 to 400 years, depending on how far they push back the Ch'olan family split, both of these morphemes had been lost as passives because the **-h-. . .-aj* passive occurs in the earliest Classic Period inscriptions. In other words, by that time and in that period of time, their "Classic Ch'olti'an" would have already accomplished two of their three implausible changes. At that rate, Chontal would then have had about 1000 years to have lost the last one in line, the **-h-. . .-aj* passive.

The claim of Houston et al. about these three passives in Chontal, as quoted above, is also unusual on another level. It seems to assume up front that the language of contemporary Chontal ancestors was not included in the Classic-Period texts and that

instead, it would have had to have gone through the same **-h-*, **-V_Ly*, and **-h-. . .-aj* stages independently. That would be quite unusual indeed to have had two separate sister languages go through this same series of changes. So really, Chontal would have only had to have lost the *-h-* passive of their Common Ch'olan and replaced it with *-k-* during whatever period of time would be allotted. That may be the point they were trying to make in their statement. However, in doing so, they failed to find it unusual for their Ch'olti'an to have gone through two of the three steps during a relatively short 200- to 400-year period.

If one instead agreed with a later time-estimate for the initial Ch'olan language split, somewhere around the A.D. 900 date marking the end of the Late Classic Period, then referring individually to the multiple separate changes required within Chontal would be irrelevant. Even according to Houston et al.'s reconstructions, two of them would have already occurred by the time of the Classic-Period inscriptions. This means that **only one change** would have had to occur **in the Chontal passive**, that from *-h-. . .-aj* to *-k-*. That would be only one change, not three, over a period of 700 years from 900 AD to 1600 AD to arrive at its current passive marker. That does not seem implausible at all. While more work needs to be done to explain the precise origin of the *-k* passive (cf. Kaufman and Norman 1984:108), the absence of the *-h-. . .-aj* (*-hC-aj*) passive alone could hardly rule out Chontal's ancestral language having been written on Classic-Period monuments.³⁵⁵

Concerning the absence of an ancestral **-VV_Ly* middle voice or mediopassive suffix, the data presented above in Section 3.3.2 suggests that this suffix may have already begun to undergo a reinterpretation during the Classic Period. Instead of only deriving mediopassives from transitive verbs, it began to be used on a couple of intransitive verbs indicating change of state or motion.³⁵⁶ At any rate, this change had

³⁵⁵One senses in the demand that every step in a morphological change must leave immediately noticeable traces, the assumption of a universal rule that morphemes never disappear but only rotate or cycle.

³⁵⁶However, there is also some evidence that the two or three roots in question may have been interpreted instead as transitive at the time as discussed in Section 3.3.2.

already progressed quite far by Colonial Ch'olti' times, encompassing all but a couple of the previously intransitive roots. By the time of Modern Ch'orti', the *-Vly* suffix had changed completely to become a thematic marker of intransitives and was no longer used at all as a mediopassive. So, although the shape was the same, it was no longer the mediopassive derivational suffix that it was during the Classic Period and, if one mirrors the approach of Houston et al., it was no longer the same suffix even though its etymological source clearly lay in the Classic Ch'olan *-Vly* middle voice or mediopassive form. This change from a mediopassive to an intransitive status marker or thematic suffix, depending upon one's analysis, is in essence comparable to the one they reconstruct for its earlier change from a **-Vly* intransitive positional to a passive or from a passive to a mediopassive.

It seems then, that the real problem for Houston et al. lies in having no clear evidence of that suffix at all in Chontal. That seems to be for them one of the two fundamental reasons to deny its ancestor's participation in the language of the Classic-Period texts. I would suggest that the absence of a morphological suffix that is only present in a functionally and semantically altered role by Colonial times in Ch'olti' is not a sufficient reason to reach such a conclusion. Instead, it is not unreasonable to suggest that the same *-Vly* suffix could have easily been dropped by another branch of the Ch'olan family over a period of 700 years between 900 AD and 1600 AD. The fluidity and uncertainty evidenced by its application, function, and meaning over time could have made it a prime candidate for extinction.

8.4.3.4 Claim: Ch'ol Ruled Out as Descendant of Classic Ch'olan

Houston et al.'s argument against the participation of Ch'ol's ancestor's involvement in the language of the Classic-Period texts is somewhat different. What is more, there is indeed a bit of irony involved in it. Although Ch'ol actually includes a suffix very close to one of the two "critical" morphemes while Chontal does not, that very fact is used as the centerpiece of their even stronger argument against its being a

descendent of “Classic Ch’olti’an.” Its form for the passive completive of most root transitives is *-h-C-i(y)* with the /y/ being present when followed by an absolutive dependent pronoun that begins with a vowel. In the case of root intransitives ending in /h/, /s/, /x/, /’/, /y/, /ch/, and /ch’/, the infix /h/ is not present and the *-i(y)* suffix is replaced by *-le(y)* (cf. Warkentin and Scott 1980:64; Josserand and Hopkins 1988b:2-3). The normal Ch’ol form of this morpheme, *-h-C-i(y)*, resembles very closely that of Ch’olti’ and Ch’orti’ except for the absence of the final *-a*. This difference is summed up by Houston et al. (2000a:333) in this way: “Simply put, Ch’ol morphology does not accord with Classic Ch’olti’an in the same way that the Ch’olti’an lineage does, since Ch’ol preserves the Common Ch’olan passive **-h-*, whereas Ch’olti’an has innovated.” As Houston et al. (2000a:330) propose:

For root transitives we reconstruct **CV-h-C* for the passive in Common Wasteko-Ch’olan. The passive in Ch’olti’an (Ch’olti and Ch’orti’ [Lacadena 1998a]) is an innovation, *-h-* . . . *-a(j)*, firmly linking the Ch’olti’an subgroup with the language of the script, Classic Ch’olti’an.

One must read this passage carefully and, at the same time, consult their chart in Figure 306 above to realize what Houston et al. are really claiming. Their reconstruction does not contend that “Classic Ch’olti’an” simply added an *-aj* thematic intransitive suffix to the Common Ch’olan passive in *-h-*. Instead, that *-h-* morpheme was supposedly ignored and a quite different *-h-* . . . *-aj* suffix that existed already in “Common Wasteko-Ch’olan,” “Common Ch’olan,” “PreClassic Ch’olti’an” as an intransitive positional was recruited in “Classic Ch’olti’an” (their name for Classic Ch’olan) as a passive. According to their interpretation then, the *-h-C-el* incompletive and *-h-C-i(y)* completive passive in Ch’ol bears no real relationship at all to the *-h-C-al* incompletive and *-h-C-a* completive in Colonial Ch’olti’. What they do not allow is that Ch’ol might simply have

lost the *-aj* portion of the passive suffix in the almost 1000 years between the end of the Classic Period and the time that Ch'ol was first documented.

It is true that Kaufman and Norman (1984:109) have also reconstructed **-h-* as the Proto-Ch'olan passive. However, taking Classic Ch'olan into account should result instead in an **-h-C-aj* reconstruction for the passive form in Proto-Ch'olan. It would then be Ch'ol which has dropped the *-aj* portion, an occurrence which would not be surprising considering the history of that language. As Houston et al. (2000a:322) rightly observe “Ch'ol appears to be highly innovative.” They are clearly not alone in this conclusion. Earlier MacLeod (1984:262) noted “The retention of more Classic morphemes in Cholti, Chorti, and Chontal (if the data herein is correct) than in Chol proper reflects considerable innovation in the latter language, an observation already made by others who have studied it.”

It is ironic then that Houston et al. would exclude Ch'ol as a descendent of “Classic Ch'olti'an” because it supposedly retained a morpheme from Proto-Ch'olan while its more conservative sister languages did not. The supposedly much more conservative Ch'olti'an would have instead gone through two additional separate changes in passive morphemes, dropping the **-h-* passive and changing the **-V_{LY}* passive, while innovating a supposedly completely new **-h-. .-aj* passive. Instead, it is many times more likely that Ch'ol did indeed innovate by dropping the *-aj* portion of the passive *-h-C-aj*. Just a glance at the further changes that occurred in the passive form by dropping even the *-h-* under specific phonetic influences, as just mentioned above, should further strengthen the likelihood that this latter scenario is indeed what actually happened.

The situation regarding the lack of a *-V_{LY}* suffix in Ch'ol is similar to its absence in Chontal. The changing nature of the suffix made it a likely target for loss in some daughter languages. However, in the case of Ch'ol, there is an additional factor involved. Ch'ol has retained the Classic Ch'olan root intransitive marker which would have had to compete with a *-V_{LY}* suffix already on its way to becoming an intransitive thematic suffix. That suffix was the root intransitive marker *-i*. In Ch'ol the *-V_{LY}* suffix lost out. This

factor will be discussed in more detail later. In Ch'olti' and Ch'orti' the *-i* intransitive marker did lose out and *-V_ly* became an intransitive thematic suffix along with several others or, according to an alternative analysis, a *-V_ly* intransitive status marker. In passing, it should also be noted that the *-y-* that occurs in Ch'ol on intransitive verbs between the intransitive marker *-i* and the dependent absolutive pronoun in all forms except the 3rd person singular, is a glide and is likely not related at all to the *-V_ly* suffix under discussion, despite its similarity.

The position of Houston et al. regarding the absence of the *-V_ly* suffix in Ch'ol is basically the same as for its absence in Chontal. They find it impossible to comprehend how those two languages could have lost that suffix in the amount of available time. Yet, as already noted, they reconstruct an *-V_ly* intransitive positional suffix for Common Ch'olan. Now both of these Western Ch'olan languages would have had to have lost this suffix of the same shape anyway by Colonial or Modern times. Surely Houston et al. would not argue that the lack of this suffix in Ch'ol would disqualify it as a member of the Ch'olan family. What is more, if Ch'ol could have lost a suffix of identical shape since Common Ch'olan times, why couldn't it have lost it since the end of the Classic Period. They accept quite extensive changes, sometimes over a relatively short period of time, in their supposed Classic Ch'olti'an lineage, whose conservatism they tout, while disallowing similar changes in the Ch'ol language which they claim is extremely prone to change. Again one might wonder about a tendency to allow for numerous push-pull changes while gainsaying the possibility of any suffix becoming unproductive or completely disappearing from a language.

8.4.4 Some Comments on Proposed Reconstructions

8.4.4.1 Problem of Overcrowded Intransitive Positional Category

Providing alternative reconstructions to those of Houston et al. would take us far beyond the task set for this present research. There are, however, some aspects of the reconstructions made by Houston et al. that deserve brief commentary here. These

include the coincidence of several reconstructed languages including Common Mayan, Common Wasteko-Ch'olan, Common Ch'olan, Common Tzeltal-Tzotzil, and PreClassic Ch'olti'an all having two different forms for intransitive positionals as shown in Figure 306 above. All of these appear without any further explanation as to how these theoretical alternatives might actually be available in practice in those languages or what their different roles might be. Did they apply to different types of positional verbs at the same time or did all of these languages start with one form and then migrate to another? It is true that in some cases these different versions do exist side by side in sister languages but is that in itself justification to reconstruct both of them as serving the same purpose in the parent language?

It is true, to be sure, that during the Classic Period there were two different forms in use, the older one in *-laj* and a newer one in *-wan*. This situation is not a problem for the Classic-Period language because it is an actual and not a reconstructed language. It covers a long period of time, about 700 years, and a wide geographical area. This data exists and needs to be explained, but it is an empirical situation which can be investigated. On the other hand, a parent, common, or proto-language, such as, for example Proto-Romance, “[i]f we are successful . . . should be similar to the Proto-Romance **which was actually spoken at the time before it split up** into its daughter languages” (Campbell 1999:109, emphasis added).³⁵⁷ Recreating two forms performing the same function in all of these reconstructed languages without justifying them seems somehow too convenient. It appears so because each of these intransitive positional slots serves mainly to hold in abeyance morphemes that later proceed on to new functions when they are needed to achieve the desired results in the next step of the process. They seem to be serving the same purpose as Houston et al.’s reconstruction of additional

³⁵⁷ By using this description of a proto-language I am not assuming that all language splits take place in this clear-cut way. As Fox (1995:133) notes, the “parent” or proto-language may actually have “consisted of a series of dialects, which gradually became more differentiated.” However, whether or not such a situation actually existed in a particular case would have to be grounded and explained. However, in the case at hand, Houston et al. do not seem to be contending that this was the case, but rather that each of the reconstructed proto-languages underwent a domino type substitution that affected the intransitive positional morpheme.

intermediate languages, such as “PreClassic Ch’olti’an,” that is, to serve as a source for the next push-pull step, at which time old morphemes of the same shape are reissued with new functions in a later daughter language.

Shift in Verbal Affixes Within the Positional, Intransitive Positional, and Passive Verbal Categories Through Time			
	Positional (Posicional)	Intransitive Positional (Posicional intransitivo)	Passive (Pasivo)
Common Mayan (<i>Maya común</i>)	*-V ₁ l	*-h- *-e:r	*-ax
Common Wasteko-Ch’olan (<i>Wasteko-ch’olan común</i>)	*-V ₁ l	*-V ₁ y *-h-...-aj	*-h- *-ax (medio)
Pre-Script (<i>Pre-ortografía</i>)	*-V ₁ l	*-h-.../aj -l-aj	*-V ₁ y *-h-,ax (medio)
Early Script (<i>Ortografía temprana</i>)	-V ₁ l	-l-aj	-h-...-aj -V ₁ y (medio)
Late Script (<i>Ortografía tardía</i>)	-V ₁ l	-wan -l-aj	*-h-...-aj *-V ₁ y (medio)
Ch’olti’ (<i>Ch’olti’</i>)	-V ₁ l	-wan	*-h-...-aj *-V ₁ y (medio+)

(Drawn by John Robertson and Redrawn by Jeff Splitstoser)
(Adapted from Hruby and Robertson 2001:31)

Figure 309. Chart of verbal affix shifts from positionals to passives reconstructed by Robertson

A later version of Robertson’s push-pull chart (from Hruby and Robertson 2001:31) shown in Figure 309 modifies the earlier one somewhat. It is of little direct use here, however, because it leaves out Common Ch’olan altogether as if it played no direct role in the overall morpheme shifts between intransitive positionals and passives. In fact, flags are also raised by the reconstruction of a “PreClassic Ch’olti’an” language, in the earlier chart, or “Pre-Script” language, in the later chart, that is independent of Common Ch’olan and thereby tends to reduce the significance of Proto-Ch’olan for interpreting verb system of the Classic Ch’olan language. What this later approach does accomplish is to remove Ch’ol and Chontal even further from consideration as descendants of Classic Ch’olan.

A more practical question could also be asked concerning the necessity of creating “Pre-Script” in order to slot the $-VV_{ly}$ suffix into a passive category. Why does this otherwise unattested step need to be created? To be sure, Morán (1935a:18) does call *puluy* a “passive” form. But he also categorizes other mediopassive suffixes as passives (Morán 1935a:17). In their article, Hruby and Robertson also attempt to show that *tzutzuuy* was a passive form early on in the script, but as discussed in Section 3.3.2.5 above, there is inadequate evidence of that. The passive in $-h-C-aj$ existed in the early script as well. What is more, it existed alongside the mediopassive in $-VV_{ly}$.

That the *tzuhztaj* passive form appeared only somewhat later, although not as late as they contend, does not prove anything concerning $-VV_{ly}$ ’s use as a passive. Instead it indicates merely that scribes used mediopassive forms rather than passive with this verb in earlier texts and that scribes later used passive forms of this verb more frequently. Some scribes also chose throughout the same time period to use active transitive forms in the same contexts. All this evidence says more about the connotations of the imparted message than it does about any difference in the function and meaning of the various morphemes they used to do so.

What is more likely to have occurred, and also obviates the need to create yet another reconstructed language, is an unmediated change from service as an intransitive positional derivational suffix to service as an mediopassive derivational suffix. Such a direct change is at least as likely a transition because the intransitive positional arguably expresses a stative position someone or something is in. By comparison, the mediopassives in question also express or connote a state or change of state. Thus an additional reconstructed language (“PreClassic”) would no longer be needed to hold the $-VV_{ly}$ in a passive slot until it could become a mediopassive and until the $*-h-. .-aj$ morpheme could have had its turn at serving as a passive.

8.4.4.2 Proposed Reconstructions a Starting Point but Tendentious

On a more positive note, Robertson's reconstructions may have pointed out an explanation for the existence of possible *-h-C-aj* positional forms that could be reflected in the **CHUM-ja** glyphic forms present on early inscriptions such as the "Hombre de Tikal" example shown in Figure 310. It is also very important that further reconstruction efforts continue beyond these initial attempts so that a more accurate picture of the relationship among the Ch'olan languages can emerge. One

would however hope that this further analysis could be carried out in a less strident manner so that a more objective approach can prevail. Perhaps some of the combative tone of the Houston et al. (2000a) *Current Anthropology* article came from the context in which the article appeared, accompanied by comments and criticisms and including a reply to the critics (Houston et al. 2000b). One example should suffice to illustrate this. When discussing the reflexes of the Common Mayan root transitive marker in the Classic-Period language along with Ch'olti' and Ch'orti', Houston et al. (2000a:334) go out of their way to emphasize the similarity of those reflexes in all of those languages.

The indicative marker of a simple CVC-transitive was **-V₁w* in Common Mayan. It marks only the imperative in modern Ch'orti' In this instance, vowel harmony in the indicative was reduced to *e* if the stem vowel was *e* and *i* elsewhere. The **-V₁w* of the transitive CVC remains from Common Mayan times to Classic Ch'olti'an. From Classic Ch'olti'an to Ch'olti', the final *-w* disappears.

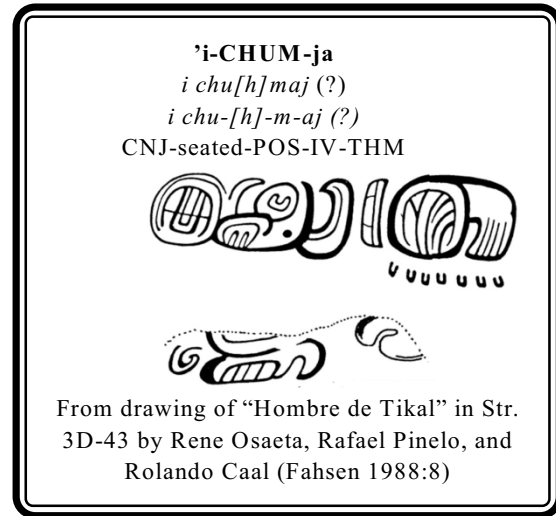


Figure 310. Possible *chuhmaj* intransitive positional form as reconstructed by Robertson

The Ch'orti' *-i*, whose function is identical to that of Ch'olti' *-V_I*, regularizes the original vowel-harmonic **-V_Iw*, but the imperative preserves *-V_I*.

Contrast that statement concerning Ch'orti' which tends to minimize the differences between it and "Classic Ch'olti'an" and the following referring to the Ch'ol reflex of the same suffix which is actually much closer to that of the Classic-Period script version than is that of Ch'orti'.

Classic Ch'olti'an is a precise preservation of Common Mayan. It is also found in a reduced form in Ch'olti' and, as *-V_I*, in Ch'ol But the point is that the Ch'olti' and Ch'ol similarity here is due to a preservation and therefore does not place them in the same lineage any more than *i-muk-u* (he-bury-transitive), "he buried it," and *xu-muq- u* (completive-he-bury-transitive) place Ch'ol and Kaqchikel in the same lineage. (Houston et al. 2000a:330)

Contrast these just-quoted statements about the lack of some attested Classic-Period forms in Ch'ol and Chontal with the following statement regarding the reason for similar lacks in Ch'olti' and Ch'orti'. In the Ch'olti' and Ch'orti' contexts, Houston et al. suggest there is nothing unusual in daughter languages lacking some forms present in the parent.

On occasion, a study disciplined by comparative linguistics may suggest that the language of Mayan glyphs preserves archaic forms lost in daughter languages (e.g., Houston, Stuart, and Robertson [Houston et al.] 1998).
Houston et al. (2000a:327)

Contrast also their negative appraisal of innovations in Ch'ol and Chontal with their statements about innovations that might have taken place in all of the daughter

languages, changes that are not present in the parent, in response to a comment on their article:

Classic Ch'olti'an also preserved the Common Mayan **-aj* of the absolutive noun, while the extant Tzeltalan and Ch'olan innovated by displacing **-aj* with *-Vl*. . . . The evidence presented above also suggests a preservation of the Common Mayan transitive marker *-V_lw*. These examples of universal lowland innovations that are absent from the script seem to negate Hofling's assumption that because split-ergativity is found in other extant languages it was part of Classic Ch'olti'an as well. (Houston et al. 2000b:348)

Although I agree with Houston et al. on the absence of split ergativity in Classic Ch'olan, it is indeed justified and a good application of comparative linguistic principles that logically leads one to the conclusion that split ergativity would likely be present in the parent language. Such comparative linguistic conclusions are not assumptions, they result from legitimate and normal application of comparative linguistic methods. A “guiding principle is that, all else being equal, we let the majority win . . .” (Campbell 1999:117). It is only because of the availability of the actual texts of the Classic-Period inscriptions that we know in this instance that comparative-linguistic methods did not lead us to a correct conclusion. In this regard, it should be kept in mind that it is **not the content** of the Classic-Period inscriptions that allows them to rule out the ancestor of Ch'ol and Chontal from being represented in the Classic Ch'olan language, but **rather only the reconstructions created by these comparative linguists**. It is only because two grammatical forms or morphemes are no longer present in Chontal that these comparative linguists have ruled out its ancestor's participation in the language of the Classic Ch'olan texts. It is only because one grammatical suffix, *-V_ly*, is no longer in Ch'ol and the occurrence of another, *-hC-i*, has been reinterpreted as ruling out any

connection to a very similar one, *-hC-aj*, in the Classic Ch'olan texts, that Ch'ol's ancestry has been called into question as well.

When bringing Ch'ol into the discussion, the emphasis of Houston et al. is on how the similarities are not important although the differences are. But in the end, on what does this whole rejection of Ch'ol depend? It depends partly upon the absence of part of one morphological form, the *-aj* of the *-h-...-aj* passive among the whole array of morphological forms present in Ch'ol and the Classic-Period language. Further, this decision also depends partly upon the reconstruction of that Ch'ol form of the passive morpheme for Proto-Ch'olan. What makes this whole line of reasoning even more open to question, or at least to modification, is that the two forms of that morpheme, *-h-* and *-h-...-aj*, are actually reconstructed as both having ultimately started from precisely the same morpheme in Proto-Mayan, that is, *-h-*. Finally, a possible change from *-h-...-aj* to *-h-* is deemed implausible in Ch'ol although that language is recognized as being very innovative and as having undergone many changes. Armed with this conclusion, the determination is made that any Ch'olan language which does not still retain acceptable reflexes of *-V_{LY}* intransitives or *-h-...-aj* passives cannot be a descendant of the language of the Classic-Period texts. Since that also applies to Acalan and Modern Chontal, they too, along with Ch'ol, are denied that position and are judged not central to the study of the Classic texts as reflected in this statement:

The most complete demonstration of several changes readily found in Mayan languages is the comparison of Tzutujil (Dayley 1985) with Q'eqchi'. . . . The important point for Mayan epigraphy is that the self-same historical processes found in Q'eqchi' are also found in Classic Ch'olti'an, placing it expressly in the ancestral line of development of Ch'olti' and then Ch'orti'. By implication, other languages, such as Ch'ol, may be less directly relevant to Maya decipherment than previously

thought (cf. Josserand 1991:12), since Ch'ol preserves *-h-*, the Common Wasteko-Ch'olan passive. (Houston et al. 2000a:330-331)

Without intending to minimize at all the importance of the Western Ch'olan languages, I do not see that the presence or absence of a part of one reconstructed morpheme is enough evidence to rule out Ch'ol as a direct descendent of the Classic Maya inscriptions.³⁵⁸ There are indeed other ways to account for data mentioned in the single argument Houston et al. find so compelling, a few of which I have already mentioned. Nor does the simple absence of two morphemes in Chontal prove that it could not be a direct descendent. That is why I have chosen to call the language of the Classic-Period inscriptions “Classic Ch'olan.” I find sufficient evidence to indicate that the content of those texts is indeed representative of the Ch'olan language family as it existed at that time. With that in mind, I will now turn to a brief outline of some of the grammatical and morphological characteristics present in the different Ch'olan languages that help to emphasize **how central they all are** to the study of the language of the Classic-Period inscriptions. Some of them point to reconstructions that, although perhaps the best choice from a purely comparative linguistic standpoint, may have to be set aside or modified in light of written empirical evidence from an actual ancestor of those languages, in this case, Classic Ch'olan.

8.4.4.3 Limits of Comparative Method in Reconstructing Proto-Languages

In the preceding section, arguments were presented that there is a lack of sufficient evidence to rule out Ch'ol and Chontal as direct descendants of Classic Ch'olan. However, there are other reasons to dispute the implications of the call declaring that, “The important point for Mayan epigraphy . . .” is to note that “[b]y implication, other languages, such as Ch'ol, may be less directly relevant to Maya

³⁵⁸Of course, an *a priori* assumption that the *-aj* of the *-hC-aj* morpheme could not have been dropped or replaced later in Ch'ol and that any other *-hC-* passive must have come instead directly from an earlier stage before a “Ch'olti'an” *-hC-aj* innovation, conveniently rules out this alternative analysis.

decipherment than previously thought” (Houston et al. 2000a:331). Instead, more important reminders from the same authors should be heeded such as notices that actual parent languages could contain specific morphological and other grammatical features that are lost in all the daughter languages of a specific family (cf. Houston et al. 2000b:348, as quoted above). Because of that, epigraphy can often profit by paying close attention to the verb morphology of close cousins such as Tzeltal and Tzotzil. Doing so has yielded, for example, the identification of morphological verbal inflection for both transitive and intransitive resultatives in Classic Ch’olan as described in detail in Sections 4.2 and 5.1.

Similar attention to each of the Ch’olan languages individually can lead to further insights that might have at times been overlooked by the usual application of comparative and historical linguistic methods. Reconstructions have to emphasize the most likely content of a parent language based upon probability. But if a particular construction is completely lacking in the accessible children, it would not be advisable or would at least be quite speculative without other strong evidence, to reconstruct a parent language with content not available in them.

Of course, reference to cousins would be legitimate and useful within the confines of the method, but it would still be hard to justify conclusions based only on data from such sources. That is why only the original texts themselves could finally provide the needed certification for the presence of Classic Ch’olan resultative forms. None of the daughter languages had intransitive or transitive resultatives at all although there is some evidence of possibly etymologically-related participles and gerunds in them. However, these forms also function as participles and gerunds in the cousin languages and the forms themselves are not completely identical to those resultative suffixes. For those reasons, there would be little or no reason to conclude that the Ch’olan language family must have at one time also included intransitive and transitive resultatives if it were not for the Classic Ch’olan texts. At best conclusions concerning the resultative’s former existence

would amount to speculation based upon their presence in the two non-Ch'olan cousins of the Greater Tzeltalan family.

At the risk of overgeneralizing, comparative and historical linguistic methods also call for following the principle of “majority wins” . . . “all else being equal” (cf. Campbell 1999:117). Again, reference to Classic Ch'olan can provide evidence that could tip the scales in favor of a minority representation. Because Classic Ch'olan represents a diachronic, 600-year view of the historical state of a real parent of a language family and synchronic views of an unreconstructed parent, the weight of its voice for possible modifications of such reconstructions is heavy indeed. There are many features of the Classic-Ch'olan verbal system that could be and have been straightforwardly reconstructed based upon the existing Ch'olan languages and information from other Mayan languages, especially those closest to the Ch'olan family. There are, however, also a few other features that could hardly have been predicted or reconstructed based upon that same data. There are also several others whose representation in the Colonial and Modern Ch'olan languages is attested but only in a limited or incomplete fashion. These might not have been reconstructed at all, only tentatively reconstructed, or interpreted differently using generally accepted rules of reconstruction. Some examples of this last group will be listed next ending with a more extensive discussion of one of them that is related to one of the main proposals being made in this study.

8.5 Evidence That All Ch'olan Languages Descend from Classic Ch'olan

8.5.1 Transitive and Intransitive Resultative in *-V_j* and *-o'm*

First, as discussed in detail in Section 6.4, none of the Ch'olan languages, Colonial or Modern, has preserved the transitive or intransitive resultative morphological suffixes. In fact, none of them have a resultative that functions similarly to that of Classic Ch'olan. Instead, it is preserved only in Tzeltal and Tzotzil, as already noted. Without evidence from Classic Ch'olan, it would likely not have been reconstructed at all. Stative participles with similar shapes might have been reconstructed but, as I have argued, these

are not the same as active resultatives. The absence of the resultative functions from all the Ch'olan languages becomes even more intriguing considering it is actually attested in the Eclipse Pages of the Dresden Codex (cf. Wald 1994b, 2004a and Figure 288 above). Although this section of the Dresden Codex is undoubtedly a copy of earlier versions, its presence there and its widespread use throughout the Classic Period does raise questions concerning the reasons for its disappearance from the Ch'olan family.

8.5.2 Mediopassive or passive in *-ax*

It is even less likely that mediopassives in *-ax* would have been reconstructed since it seems that only scattered fossilized forms can be attested in the Colonial and Modern Ch'olan and Tzeltalan languages. Although there are not many examples of this suffix in Classic Ch'olan, there are enough to surmise that at least at certain places and times, for example at Copán as evidenced on Stela J, at Palenque, and in the language of some visitors to Naj Tunich, it may have been more than just a fossilized form.

8.5.3 Mediopassive in *-V_Ly*

Of the Post-Classic Ch'olan languages, only Ch'olti' still preserves very limited usage of *-V_Ly* as a mediopassive according to Morán's (1935a:18) interpretation. But even in Ch'olti', it is more common as a thematic suffix for certain intransitive roots (Morán 1935a:21; Kaufman and Norman 1984:104). Ch'orti' has completely reinterpreted it as a thematic suffix for a class of root intransitives, mostly those indicating a change of state or motion (cf. Fought 1972:46; Wichmann 1999:22, 159). Based upon its use in those two languages alone, it would have likely been reconstructed instead as a suffix for a class of root intransitive verbs. This would have only minimally matched its use in Classic Ch'olan because it appears there only on a couple possibly intransitive roots as noted earlier in this study in Section 3.3.2. But for the most part, it was used as a suffix to derive mediopassives from a class of transitive roots involving a change of state. A *-V_Ly* suffix, usually *-iy* does occur on intransitive verbs in Ch'ol, but it

is probably not related to the $-V_{\text{I}}y$ suffix because in Ch'ol the vowel is usually not harmonic and the $-y$ occurs only between it and an explicit, marked absolutive dependent pronoun that begins with a vowel. Because it does not occur in 3rd person singular contexts, it probably serves as a glide to provide a transition between two vowels.³⁵⁹ Because the function of this $-VV_{\text{I}}y$ suffix may have already shown signs of becoming unstable in Classic Ch'olan, because this reinterpretation was ongoing in Ch'olti', and because its grammatical function had finally changed completely in Ch'orti', it is not surprising that its use would have been discontinued in the other Ch'olan languages. This would have been even more likely if they preserved the original root-intransitive status marker.

8.5.4 Root Transitives in $-V_{\text{I}}w$

Although the $-V_{\text{I}}$ root transitive marker might be reconstructed for Ch'orti' by referring to its Colonial sister language Ch'olti', it is otherwise basically unrecognizable as such. Only in the case of /e/ root vowels is there any sign of vowel harmony. A more secure hypotheses, independent of information from other languages, might have been that the usual suffix was $-i$ but that the $-e$ appearing on verbs with /e/ vowel roots was a sign that vowel harmony was just beginning to develop through a process of assimilation. Also, since $-i$ is also used as a thematic suffix for intransitive verbs, it could hardly have still been considered a suffix that marks a verb as a root transitive. Instead, these are now all thematic suffixes. This is not the case for either Ch'olti' or Ch'ol, both of which still employ $-V_{\text{I}}$ as a root transitive marker. But even they no longer carry the $-w$ which is attested in Tojolab'al only on root transitives and then only in the incomplete when followed by a vowel (cf. Furbee-Losee 1976:131; Bricker 1986:126-131). On a superficial level, this appears to be similar to the situation with the $-y$ - on Ch'ol intransitives. In this case, however, other considerations have lead to the reconstruction

³⁵⁹ However, one should also keep in mind that the final $-j$ of $-h-C-aj$ passives only appears in Ch'olti' when the $-a$ is followed by the vowel of the $-el$ incomplete suffix. It is absent on the completive version and does not appear in Ch'orti' at all. It is really only additional external information from other languages that can securely settle such issues.

of **o(w)* plain status for Proto-Mayan root transitives by Kaufman (according to Justeson 1997:65).³⁶⁰ Ultimately, it was the use of the **wa** syllabic sign to write the suffix in the Classic-Period inscriptions that lead to my conclusion (Wald 1994a) that the *-V_l* suffixes in Ch’olti’ and Ch’ol descended from the *-V_l(w)* of Classic Ch’olan.

8.5.5 Root Intransitives in *-i*

It has already been noted in Section 3.3.1 that, of the Colonial and Modern Ch’olan languages, only Ch’ol has fully preserved the *-i* root intransitive marker. Although the *-i* suffix in Ch’ol is often classified as completive inflection, it really never appears as a completive unless also accompanied by auxiliaries or particles of adverbial or other derivation. Handy rules of thumb that have been devised by grammarians indicating that the completive stem is formed by dropping the *-el* incompletive suffix and adding an *-i* also tend to reinforce that view (cf. Warkentin and Scott 1980:71; Aulie and Aulie 1998:235).³⁶¹ Instead, this *-i* is more accurately interpreted as the root intransitive status marker preserved from Classic Ch’olan which, in turn, is the Classic-Period reflex of the reconstructed **-ik* Proto-Mayan root intransitive status marker. Only insofar as it is contrasted with the *-el* incompletive suffix can it be regarded as a sign of completive inflection by default. Ch’olti’ has preserved only minimal evidence of a former intransitive status marker in *-i*. It occurs only on one root intransitive and one irregular intransitive verb in Morán’s Ch’olti’ (cf. Sattler 2004:368). Unfortunately there is otherwise no other documentation from Ch’olti’ that might provide further evidence. Taken on its own without reference to other languages, this *-i* might simply appear to be the same as the *-i* thematic suffix that appears on a number of other verbs.

³⁶⁰The referent of “Kaufman (1987)” provided by Justeson is missing from the “References” section at the end of the volume (Macri and Ford 1997:151)

³⁶¹It is ironic that a relatively recent suffix, at least in its current capacity as an incompletive, should be made the default form used as a base to arrive at a much older form, the intransitive status marker, that had been serving the same purpose throughout the Classic Ch’olan period. This rule of thumb had already been used for Ch’olti’ by Morán (1935a:16-17) in 1625/1695. Such a strategy may have been practiced throughout the Colonial Ch’olan and Yucatekan area by the Spanish clerics.

Ch'orti' does not employ *-i* as a root intransitive marker. Instead, root intransitives take various thematic suffixes, among them the *-V_iy* suffix also in evidence as such already in Ch'olti' and also present on a couple, possibly root-intransitive, verbs in Classic Ch'olan. The *-i* suffix present on verbs of all classes in Chontal is strictly an inflectional suffix marking the completive aspect. It is not likely that it is a reflex of the intransitive status marker at all. What this means, in effect, is that, other than its weak appearance in Ch'olti', only Ch'ol preserves the status markers of both root transitive and root intransitive verbs as attested in the Classic Ch'olan texts. Considering that Ch'ol is known for being very innovative and for exhibiting many morphological changes, this must clearly be taken into account when judging whether or not it may be a direct descendent of Classic Ch'olan. Of course, both of these suffixes can be traced back to Common or Proto-Mayan and as such are not definitive evidence of direct descent from Classic Ch'olan. Nevertheless, noting that Ch'ol is the only Ch'olan language that has preserved both of these Classic Ch'olan markers, rather than innovated for either, surely should not be considered as a negative factor in making a judgment about whether it is a direct descendant.

8.5.6 Intransitive Positionals in *-wan* and *-laj* and Passives in *-h-C-aj*

The use of *-waan* as an intransitive positional suffix was widespread throughout the Classic Maya area although it appeared on the scene later than a parallel suffix *-laj*. Only *-wan* appears as an intransitive positional suffix in Ch'olti', Ch'orti', Acalan Chontal, and Modern Chontal. This data would seem to match the situation in Classic Ch'olan in which the use of *-waan* seemed to spread out as time went on roughly from the east to the west (cf. Hruby and Child 2004:21).³⁶² However, there are sites at which

³⁶²There is really no solid evidence that Chontal, as a language supposedly foreign to "Ch'olti'an" was the source of the *-wan* suffix. What Hruby and Child (2004) have established so far is that the *-wan* suffix is first attested at Tortuguero which is in an area somewhat to the west of the likely location of the Acalan speakers near Laguna de Terminos. However, since it is roughly in the general area, although not close, the distance is not the major concern. What is problematic is the assumption that Chontal was indeed recognizable as a separate language at that time, that is, around A.D. 645. Second, it is only Robertson's reconstruction that denies the immediate ancestor(s) of Chontal and Ch'ol any participation in the use of a

(continued...)

-waan occurs only rarely, for example, at Tikal. There are also sites at which *-laj* still occurs late in the Classic period, for example, on Toniná Monument 95 (cf. Graham and Mathews 1996:120) and at Palenque. With that in mind, it makes sense to raise the possibility that the intransitive positional form *-laj* might have also continued on in a Ch'olan language after the late Classic Period. First, it should be noted that the optative form of the positional is attested as *-lek* in Chontal, Ch'ol, and Ch'olti'. But it is only Ch'ol which may still preserve a form similar to *-laj* for the intransitive positional. That form is *-le(y)* (cf. Josserand and Hopkins 1988a:4). I am tentatively suggesting that *-le(y)* may be a later Ch'ol reflex of the Classic Ch'olan *-laj* which was carried down by speakers and writers from one of the areas in which *-laj* was still being used at the time that monumental writing ceased in the major polities of the Southern Lowlands. Indeed, there were other places besides Tikal and Toniná at which *-laj* was still in use during the late Classic Period. For example, even at Palenque, *-laj* still appears on the Tablet of the 96 Glyphs dated at A.D. 783.

Of course, there are a number of questions that could be raised about this proposal, but that is why it is being only tentatively suggested. If correct, it would add to the credibility of the overall proposal that all of the Ch'olan languages are descendants of the language of the Classic Period script. First, as already noted, *-lek* is attested as the optative suffix for Chontal, Ch'ol, and Ch'olti'. But it is only Ch'ol that also attests a suffix beginning in *-l-* for the completive of intransitive positionals. One might argue that the remaining portion of the *-l-e(y)* suffix differentiates it from the Classic Ch'olan *-l-aj* form because, as Robertson notes, the *-l-* can be reconstructed all the way back to Proto-

³⁶²(...continued)

-laj intransitive positional suffix. The real advantage of identifying Chontal as the source of the *-waan* loan is that it helps them and Robertson (Houston et al. 2000a:336) keep Chontal's linguistic ancestor from any direct participation in the Classic-Period script by treating it as a separate language already at that early time. It is ironic that Hruby and Child suggest this loan as an example of the powerful political influence of the Chontal people while at the same time denying the Chontals the "prestige" of writing in their own language. It is also quite surprising that, after indicating the *-wan* suffix came from the supposed Chontal speakers west of the Usumacinta River and spread from there because of their political influence, they do not consider it necessary to explain why the *-laj* suffix would have continued to be used deep into the Late-Classic-Period inscriptions at Palenque (for example, Tablet of the 96 Glyphs, Temple XXI Panel), which was located in the heart of the supposed Chontal area (Hruby and Child 2004:131).

Mayan. However, it may also be indicative of a pattern of substitution in Ch'ol which provides evidence of both *-le(y)* and *-i(y)* spreading to contexts in which the intransitive thematic *-aj* appeared in Classic Ch'olan.

As noted earlier, the Classic Ch'olan passive form of root transitive verbs can be transcribed as *-h-C-aj* although the infixed *-h-* is never written. Both Ch'olti' and Ch'orti' have passive forms in *-h-C-a* with the final *-j* no longer attested in the completive form. Surprisingly, Ch'ol employs two different forms of intransitive thematic suffixes to form passives used in completive contexts. One of them includes the infixed *-h-* and an *-i(y)* intransitive thematic resulting in *-h-C-i(y)*. The other does not include an infixed *-h-* but only the suffix *-le(y)*. This suffix occurs after roots ending in any member of the consonant set $\{h,s,x,y,ch,ch'\}$. This *-le(y)* suffix seems to be precisely the same suffix that occurs on the intransitive completive form of the positionals as just noted. That this is not just a different suffix with the same form as the one that occurs on intransitive positionals in Ch'ol is

affirmed by the unusual parallel forms used on passives in the incompletive aspect. As can be seen in Figure 311, the incompletive passive form for most CVC transitives is *-h-C-el*. But for those with the same set of final root consonants $\{h,s,x,y,ch,ch'\}$, the incompletive form takes exactly the same suffix as intransitive positionals, that is, *-täl*. That is not likely to be a mere coincidence. The same pattern is followed for the optative

Ch'ol		
Passive Incompletive	Passive Completive	Passive Optative
<i>CV-h:</i> <i>CV-s:</i> <i>CV-x:</i> <i>CV-':</i> <i>CV-y:</i> <i>CV-ch:</i> <i>CV-ch':</i> <i>-täl</i> <i>CVC: [other]</i> <i>-h-C-el</i>	<i>CV-h:</i> <i>CV-s:</i> <i>CV-x:</i> <i>CV-':</i> <i>CV-y:</i> <i>CV-ch:</i> <i>CV-ch':</i> <i>-le(y)</i> <i>CVC: [other]</i> <i>-h-C-i(y)</i>	<i>CV-h:</i> <i>CV-s:</i> <i>CV-x:</i> <i>CV-':</i> <i>CV-y:</i> <i>CVch:</i> <i>CVch':</i> <i>-le-k</i> <i>CVC: [other]</i> <i>-h-C-ik</i>
Positional Incompletive	Positional Completive	Positional Optative
<i>CVC: -täl</i>	<i>CVC: -le(y)</i>	<i>CVC: -le-k</i>

Figure 311. Parallel suffixing patterns on passives and intransitive positionals in Ch'ol

of passives which are formed by either *-h-C-ik* or *-lek* depending upon the final consonant of the root. This situation could be driven further by a leveling of the distinctions among all these categories, thereby allowing these affixes to be applied in contexts that formerly would have been impossible. An example of this might be found in the middle voice or mediopassive forms. Ch'ol now uses the same forms for both passive and mediopassive derivation. It could also be a sign that the meaning of these affixes has changed, allowing mutual substitution based upon factors other than their full or previous meanings and functions. This may be reflected in the use, albeit limited, of the incomplete and complete positional suffixes to form some inchoatives.

These data from Ch'ol provide some points to consider when drawing conclusions concerning its historical position in the Ch'olan family. Ch'ol has undergone a drastic amount of leveling within its verbal system. Morphological distinctions among several categories have weakened or have disappeared altogether. There is strong evidence of such leveling and substitution among suffixes precisely in those contexts in which there is diachronic evidence for the previous appearance of an *-aj* thematic intransitive suffix. This includes passives, intransitive positionals, mediopassives, and inchoatives. All this change has taken place in precisely what have otherwise been attested as *-aj* suffix contexts in the Ch'olan family, despite uncertainty as to whether or not those particular suffixes represent precisely the same morpheme etymologically. Therefore, using these data to support a judgment that the *-aj* never existed in those contexts earlier in Ch'ol's history seems unwarranted. At the same time, the spreading of positional suffixes to other derived intransitives, that is, to passives, mediopassives, and inchoatives tends to reinforce the strong role of the positional category in driving those changes. Based upon these two states of affairs, the replacement of *-aj* thematic intransitive suffixes with *-i(y)* and *(l)-e(y)* and the spread of the positional suffixes *-täl* and *-le(y)* to other intransitive categories, it is quite reasonable to reconstruct an earlier intransitive positional in *-laj* for Ch'ol.³⁶³ The same data also supports the possibility of reconstructing an earlier *-h-C-aj*

³⁶³ An alternative, one I think is less likely, is to suggest that the optative *-lek* positional suffix
(continued...)

passive in Ch'ol. Just as the absence of the *-aj* thematic or intransitivizer from the positional in *-l-* does not prove that it was never present, so too does the absence of the *-aj* on the passive not prove that it was never present on it.

In sum, this whole state of affairs concerning the *-aj* thematic intransitive suffix in Ch'ol adds to the data that makes it unnecessary to place Ch'ol completely outside of the Classic Ch'olan tradition and language family. While a reconstructed progression from a Classic Ch'olan passive in *-h-C-aj* to a Ch'ol passive in *-h-C-i(y)* was surely possible even before considering the data just presented here, the addition of this information makes such a progression even easier to understand and accept. That a passive in *-h-* without the *-aj* suffix can be reconstructed further back in time is not directly relevant to this data or argument except for helping to explain where the original suffix came from diachronically.

The *-i(y)* suffix that occurs on the passives forms whose stems are not included on the exceptions list most likely has its source in the root intransitive status marker. In this context, that suffix retains its character as an intransitive status marker, albeit now not only a marker of root intransitives. Its occurrence here also provides further evidence that the *-i(y)* suffix is primarily an intransitive status marker in Ch'ol and is only an indicator of completive inflection by default since it now contrasts with an incompletive form in *-el* derived historically from a nominalizer. Perhaps more accurately, it was simply recruited as a pre-existing gerund or participle. This is quite different from the behavior of the *-i* suffix in Acalan and Modern Chontal. In Chontal, the *-i* serves on its own as completive inflection and likely does not even have the same diachronic origin. At any rate, the *-i(y)* suffix in these contexts in Ch'ol behaves not as completive inflection but as a marker of intransitives. For that reason, it can be replaced by another intransitive marker in *-le(y)* without any change in the aspect of the verbs in question. It is instead the auxiliaries and particles that indicate the actual aspect or tense/aspect combinations and they remain the same no matter which suffix, *-i(y)* or *-le(y)*, happens to appear. Compared to Classic

³⁶³(...continued)
dropped the *-k* and replaced a putative *-wan* intransitive positional with one in *-le(y)*.

Ch'olan, then, Ch'ol has slightly broadened the use of the root intransitive marker *-i* from mainly root intransitives to also include several derived intransitive forms, including passives. For all these reasons, characterizing it as a marker of root and derived intransitives rather than as completive inflection appears to be the most accurate analysis.

8.5.7 Temporal Deictic Enclitics in *-ij* and *-ijiiy* ∞ *-iiy*

As has likely become abundantly clear in the detailed discussion included in Sections 6 and 7.2.3, I do not find any evidence that these enclitics are used as verbal morphological suffixes in Classic Ch'olan. However, especially the *-ijiiy* ∞ *-iiy* enclitic plays such an important role in the discourse structure of so many Classic-Period texts that reviewing its continued use or its substitutes in the Colonial and Modern Ch'olan languages is at least fitting and, considering its overall importance to the conclusions of this study, is, for all practical purposes, necessary. All members of the Ch'olan language family employ reflexes of Classic Ch'olan *-ij* and *-ijiiy* ∞ *-iiy* but, in all of them except Acalan Chontal, its role is limited to use with adverbs, adjectives, numbers (nouns), and time-period nouns to form adverbials referring to time in the future or the past. The Ch'olan languages, including modern Chontal, do not employ versions of *-ih* (*-ij*), *-ihi* (*-iji*) or *-i* attached to verbs to show the direction of either forward or back reference. Nor do they use it on verbs to indicate distant or removed past-time in narratives. However, *-ihi* ∞ *-i* may be the etymological source for the Chontal completive suffix *-i* which appears on many forms of both transitive and intransitive verbs in both Acalan and Modern Chontal. It is important to note that, in that context, it is no longer an enclitic and, as a grammaticalized suffix, it retains only the portion of its semantic content that provides the sense of a complete action or an action as a whole.

In both Ch'ol and Ch'orti', *-ix* rather than *-ihi* ∞ *-i* is used in contexts similar to those in which the latter is used in Classic Ch'olan or Acalan Chontal. Because of that, it is sometimes considered to be past perfect inflection just as some consider *-ihi* ∞ *-i* to be past perfect inflection in Classic Ch'olan and Acalan Chontal. Careful evaluation of the

extent of grammaticalization would have to precede, and would likely preclude, any such conclusion. In Ch'olti' and Ch'orti', the *-i* form of the enclitic is used attached to *oni* to mean “in the past.” But in Ch'orti', the two suffixes are sometimes combined on the same adjective, *on*, to form an adverb with more emphasis on a time longer ago. Since *oni* is “before, earlier, previous” and *oni'ix* “in early times, long ago” (Wisdom 1950:550) it seems that, just as in Ch'ol, it is *-ix* rather than *-i*, or at least along with *-i*, carries the idea of “distant past” in Ch'orti'. By contrast, *oni* is used to indicate something happening prior to another event, for example, “*oni' ne'n we'en* ‘I ate before/already’” and not “I ate long ago.” In Classic Ch'olan, both of these connotations are carried by the same *-ijiiy* ∞ *-iiy* enclitic.

There is one important difference between the way the enclitic *-ihi* ∞ *-i* is used in Acalan Chontal and the way *-ijiiy* ∞ *-iiy* is used in Classic Ch'olan. This difference does not lie in the way this enclitic itself is used in either language. Instead, it lies in a major difference between the verb systems in each. In the Classic-Period texts, the enclitic does not interact with any morphological present-past or incompletive-completive aspect affixes. Nor does it play off present-past or incompletive-completive constructions employing auxiliary, particle, or even syntactic morphemes. There are derivational morphemes for mood and voice, markers for intransitivity and transitivity, verbless stative constructions, intransitive and transitive resultative aspect suffixes, and more, but no markings for present-past tense or incompletive-completive aspect. There are adverbs, including adverbial enclitics, dates, and other discursive and contextual methods to provide for and control both narrative and extranarrative temporal flow. All these methods are used to deliver what is supplied by morphological affixes and auxiliaries in other languages, including Classic Ch'olan's own descendants.

In Acalan Chontal, incompletive and completive aspectual morphology is added. Nevertheless, the enclitic functions in the same way, still providing for and controlling both narrative and extranarrative temporal flow. It is difficult to comprehend how the same enclitics functioning in the same way with the same meaning could have been

verbal tense inflection in Classic Ch'olan and have reverted to being enclitics again in Acalan Chontal. Such regression is contrary to what has been found to be the norm in the clinal progression of grammaticalization in languages throughout the world.

Because there is aspectual inflection in addition to the past temporal enclitic in the Acalan Chontal document, it is unlikely that *-ihi* ∞ *-i* is functioning in it as inflection. Instead, it is providing explicit temporal information concerning the events that are being narrated or referred to in the text. That is why it is so important for those such as Houston et al. (2000b) and Robertson et al. (2004) who believe that this enclitic was a morphological marker of tense or aspect in the Classic-Period language to remove Acalan Chontal from the list of its direct descendants. That is also why they must rule out the participation of Chontal speakers in writing Classic-Period texts in their own language. Since it is unlikely that Chontal-speaking people would not have written such texts, they propose an elaborate system of scribes speaking vernaculars and writing only in the prestige language, Ch'olti'an. They adopt as a pattern the well-known European model of having people speak their own languages while writing in Latin instead (Houston et al. 2000a:335). There is indeed some evidence of this type of influence at a few sites in northern Yucatan (Lacadena and Wichmann (2002) and in the Codices (Wald 1994b, 2004a; Lacadena 1996). However, there is little or no solid evidence in the Classic-Period texts of differences securely tied to those among the Colonial and Modern Ch'olan languages that are not otherwise explainable based upon diachronic developments in the Colonial and Modern languages.

	Colonial Chontal	Modern Chontal	Ch'ol	Colonial Ch'olti'	Ch'orti'
Transitive Complete					
Root	[1 st /2 nd p ob] - Ø [3 rd p. ob] - i	[1 st /2 nd p ob] - Ø [3 rd p ob] - i	-V - Ø	-V - Ø	CVC: -i - Ø CeC: -e - Ø
Derived	- i	- i	- Ø	- Ø	- Ø
Intransitive Complete					
Root	[1 st /2 nd p] - Ø [3 rd p] - i	[1 st /2 nd p] - Ø [3 rd p] - i	[1 st /2 nd p]-iy - Ø [3 rd p] -i - Ø	-Vy, -ay - Ø	-Vy, -ay - Ø
Derived	- i	- i	-i(y)? - Ø	- Ø	- Ø
Positional Complete					
	-w-an - i	-w-än - i	-l-e(y) - Ø	-w-an - Ø	-w-an - Ø
Passive Complete					
	-k - i	-k - i -k-in-t - i	-h-C-i(y) - Ø -l -e(y) - Ø	-h-C-a - Ø	-hC-a - Ø

Figure 312. Complete aspect suffixes in Colonial and Modern Ch'olan languages

8.5.8 Lack of Complete and Incomplete Aspect Forms in Classic

Ch'olan

One conclusion reached in this study based upon the research and analysis presented, is that Classic Ch'olan does not employ grammaticalized morphological affixes for incomplete or complete aspect. Continuing with the topic of this section, the question must then be asked, “Do any of the Colonial or Modern Ch'olan languages preserve this characteristic of Classic Ch'olan? If so, to what extent?” Figure 312 includes a general overview of many of the complete inflectional suffixes for all of the Colonial and Modern Ch'olan languages.³⁶⁴ All the complete suffixes are located on

³⁶⁴Please note that especially for Modern Chontal and Ch'ol, and especially in the case of intransitive verbs, this chart simplifies the actual situation. However, for the purposes of the issues under consideration here, the chart is adequate. The differences concern mainly the behavior of Chontal and
(continued...)

the right of each cell in the table. Starting with the completive aspect suffixes for Colonial and Modern Chontal, the full complement is quite apparent. Acalan Chontal has an *-i* completive suffix for all root and derived transitives, for all root and derived intransitives including passives, and for positionals and passives.³⁶⁵ Only in the case of

	Colonial Chontal	Modern Chontal	Ch'ol	Colonial Ch'olti'	Ch'orti'
Transitive Incompletive					
Root	<i>-e'</i>	<i>-e'</i> neg: 3 rd p. obj. <i>-Ø</i>	<i>-Ø</i> [Rare: <i>-e,-e'</i>]	<i>CVC: V -Ø</i>	<i>CVC:- i -Ø</i> <i>CeC:-e -Ø</i>
Derived	<i>-n</i>	<i>-n</i> neg: 3 rd p. obj. <i>-Ø</i>	<i>-n</i>	<i>-n</i>	<i>-Ø</i>
Intransitive Incompletive					
Root	<i>-el</i>	<i>-e,-o</i>	<i>-el, -äl</i>	<i>-el,-ael</i>	<i>-Vy: -Ø</i>
Derived	<i>-el</i>	<i>-e</i>	<i>-el</i>	<i>-el</i>	<i>-Ø</i>
Positional Incompletive					
	<i>-t -el</i>	<i>-t -ä(l),e(l)</i> neg: <i>-w-an -Ø</i>	<i>-t -äl</i>	<i>-t -al</i>	<i>-w-an -Ø</i>
Passive Incompletive					
	<i>-k -el</i>	<i>-k -an</i> <i>-k-in-t -e</i>	<i>CVhC -el</i> <i>CV- ',ch, ch',h,</i> <i>s,x,y -t-äl</i>	<i>CVhC -al</i>	<i>CVhC -Ø</i>

Figure 313. Incompletive aspect suffixes in Colonial and Modern Ch'olan languages

³⁶⁴(...continued)

Ch'ol verbs in relative and complement clauses (cf. Quizar and Knowles-Berry 1988:81-86).

³⁶⁵Of course, positional and passive verbs are intransitive as well but are listed separately because the morphological suffixes they take are often different from other intransitives.

1st and 2nd person objects for transitives and 1st and 2nd person subjects for intransitives is the completive suffix absent, being replaced by the absolutive dependent pronouns. In the case of Ch'ol, there is no inflectional suffix for the completive aspect for any of the categories.³⁶⁶ The same is true for both Ch'olti' and Ch'orti'. So these three, Ch'ol, Ch'olti', and Ch'orti', match Classic Ch'olan in having no morphological suffixes to mark the completive aspect.

Turning to the incomplete as shown in Figure 313, the situation is basically the same for Colonial and Modern Chontal, except that the 1st and 2nd person incomplete forms are the same as for the 3rd. Neither of the transitive incomplete suffixes ends in a vowel and so the absolutive pronominal objects do not replace the inflectional suffix. The situation in Chontal for all intransitive incomplete suffixes, including positionals and passives, also differs from the completive. Although the suffixes for Modern Chontal do end in vowels, having dropped the final *-l*, they remain even in the case of 1st and 2nd person subjects. That is because, unlike Classic Ch'olan, Chontal has a split ergative verbal system. In the incomplete, the subject of intransitive verbs is represented by the ergative pronoun rather than by the absolutive pronoun. Therefore, since the dependent pronoun precedes rather than follows the verb, it does not affect the incomplete suffix.

There are, however, two very intriguing incomplete forms that have a direct and important bearing upon the issue concerning similarities with the verbal system of Classic Ch'olan. As Bybee et al. (1994:237) note referring to Givón (1979), “negative contexts are among those that tend to be conservative” and so they may contain “older forms whose range of use has been restricted by the development of new forms.” For that reason it is very important to investigate whether or not verbs in negative contexts vary from those in positive contexts in regard to aspectual affixes. If they do, the forms that appear in those negative contexts are likely to represent an earlier form that has been replaced in positive contexts. With that in mind, it is quite remarkable that in Chontal the

³⁶⁶This assumes that one analyzes the affixes to the left as derivational suffixes or status markers as already discussed earlier. If one does not, the intransitive *-i(y)* and *-l-e(y)* would have to be considered completive suffixes for all intransitives. This would change one's view of Ch'ol's position here but not the overall conclusion that will be presented.

negative form of the transitive incomplete for *k'ux* “to eat,” instead of *käk'uxe* “I eat,” is ***mach käk'uxu*** “I do not eat” (see Knowles 1984:319; Keller and Luciano G. 1997:454). This is precisely what is attested in Ch'ol and Ch'olti' but only in the completive aspect. It is the reflex of the expected **nik'uxuw* in Classic Ch'olan, so far only attested in the passive voice as *k'u[h]xaj* (cf. Stuart 1987:28-29).

This difference in aspectual morphology in negative contexts even extends to the derived transitives. In such contexts, they do not have their normal *-n* suffix in the incomplete as shown in Figure 313. Thus *kätz'ib'än* “I write it” becomes ***mach kätzib'ä*** “I do not write it” in negative contexts (Knowles 1984:320; Keller and Luciano G. 1997:454).

A similar pattern carries over to intransitives. While the positive incomplete is *ub'ixe* “it goes,” the negative is ***mach ub'ix*** “it does not go” (Keller and Luciano G. 1997:464; cf. Knowles 1984:323). Note that although it is the *u-* 3rd person singular pronoun that occurs in the positive example, what appears in the negative one is **not the pronoun** but simply a proclitic that occurs in these contexts with intransitive verbs for all persons. The 3rd person singular is shown here to point out that there is no *-i* suffix. Its absence helps to strengthen the view that the *-i* which appears on intransitives in the completive is an aspectual completive suffix and not a marker of intransitives. It is also very important to note that these **negative intransitive forms reflect the shape of the system before the ergative split**. That can be better observed in the 1st person singular form ***mach ub'ixon*** “I do not go.” It contrasts with the positive incomplete *käb'ixe* “I go.” In the negative example, the 1st person subject of the verb (S) is represented or referred to by the absolutive (Set B) dependent pronoun and not by the preposed ergative, which is *ka-* in the positive one.

The retention of the older forms continues on into the negative positional forms. The intransitive positionals have *achumtä(l)* “you are sitting down” (“are seated”), but their negative counterpart is ***mach uchumwanet*** “You are not sitting down” (“are not seated”) (cf. Keller and Luciano G. 1997:464; Knowles 1984:323-324). Because the

variation in the negative incomplete form extends even to the derivational suffix, the difference is quite obvious. This makes Chontal the only other family member besides Ch'orti' to have preserved the form *-wan* at all in the incomplete. Only in the negative present progressive has the newer form ousted the old: *mach mu'/muk' uwa'tä(l)* "I am not standing." This evidence supports not only the view that the incomplete forms are nominalizations but also two other important points that have been made several times in this study. One is that the use of these and other nominal forms as incompletives is quite recent, that is, most likely post A.D. 1492, and that the progressive aspect itself is a recent phenomenon as well. What is traceable back to Classic Ch'olan is instead the **lack of distinction between incomplete and completive aspect**, not to mention between present and past tense, by verbal morphological means.

The incomplete forms in Ch'ol and Ch'olti' are quite close to the positive forms of Chontal and even closer to each other. Ch'olti' differs from Ch'ol but only slightly in the incomplete of root transitives. Ch'olti' root transitives keep their harmonic vowel but do not add a suffix, while Ch'ol root transitives also do not add a suffix but lose their harmonic vowel. The other differences are even more minor: Ch'olti' attests an *-al* suffix for incomplete passives whereas Ch'ol attests *-el*. It should be noted for all four of these languages, excluding Ch'orti', the incomplete forms are all etymologically nominalizations, except the root transitives. The source of the *-e'* suffix in Chontal is not clear, but even it has *-V_i* in the negative incomplete. The rest of the incomplete suffixes in *-el* were originally gerunds as were those in *-n*. At least some of those in *-äl*, *-al* and *-ael* were likely formed from a combination of the *-el* and stems ending in *-a* or *-ah*. Both *-el* and *-an* are attested in Classic Ch'olan but as gerunds and not as incomplete forms.

For those espousing a more traditional view of aspect morphology in the Ch'olan languages, the apparent lack in the Classic-Period texts of incomplete forms has presented a serious problem. There has been a constant search over the years for precisely those forms that are at least similar to those in Figure 313. Some seemingly

matching forms have been identified, such as *utz 'i[h]b 'najal* in the Primary Standard Sequences on vases, but it is more easily interpreted as a possessed nominalized form of the derived passive form *tz 'i[h]b 'naj* which also occurs in the Primary Standard Sequence in the appropriate contexts. There are other similar examples such as *uxulnajal*. Another form that is cited from time to time is *chumtaal* on the Kerr #2784 vase as discussed earlier in Section 7.1.4 (see Figure 294 above). But instead of being the incompletive form of a positional verb, it is an example of a very common suffix in Ch'orti' meaning "place." It is also attested in Ch'olti' in that same meaning and function. Thus the ruler is shown in his "sitting place" or more simply on his "seat" or "throne". Examples similar to this can be found in Ch'olti' and Ch'orti'. Providing contextual evidence in Classic Ch'olan for forms of possible incompletives in *-n* has been even harder. Most of them have turned out to be probable antipassives or passives instead. There are indeed rare examples of gerunds or participles in *-el*. One of them on Copán Altar F' *hulelijiiy* has already been shown in Figure 286. But there it is just what its form implies, a gerund. Although this is the form that was recruited almost 800 years later to serve as part of an incompletive construction, it is the original role as a nominalized verb form that it plays in the Classic Ch'olan texts such as this one.

It has already been noted that the completive forms of Ch'ol, Ch'olti', and Ch'orti' verbs still follow the general pattern set by Classic Ch'olan. In other words, these three have all preserved the original Classic Ch'olan pattern of not having any inflectional suffixes for completive aspect. Chontal has innovated with a completive aspect suffix. However, as also noted, Chontal preserves the original *-Ø* suffix for its negative incompletive forms. So, to that extent, Chontal matches the pattern of uninflected Classic-Ch'olan forms in a way that Ch'ol and Ch'olti' do not. But only one of the Colonial and Modern Ch'olan languages attests morphologically uninflected aspectual forms for both the incompletive and completive, and that is Ch'orti'. To this extent, Ch'orti' has preserved formally and morphologically the verb pattern attested throughout the Classic-Period texts in both incompletive and completive contexts. Not

only can its verbs function well without present/past tense and incomplete/completive aspect morphological suffixes, but they can even have temporal enclitics attached. The enclitic differs in that the usual attested enclitic for time-in-the-past in Ch'orti' is *-ix* instead of *-ijiiy* ∞ *-iiy*. Since that is true, how then can one justify forms being listed for incomplete and completive in Ch'orti' as has been done in Figure 312 and Figure 313.

Ch'orti', by inventing a third set of dependent person markers, was able to preserve exactly the morphological situation most common in the Classic period, that is, the lack of morphological inflectional suffixes on verbs to indicate present and past tense and incomplete and completive aspect. Of course, in the past, this has most often been interpreted instead as a leveling of the incomplete forms that began with the root transitives and eventually spread as well to the intransitives by the time Ch'orti' was documented, as noted by Kaufman and Norman (1984:98-99). However, they also mentioned another possibility, that is, "that Proto-Cholan did not have distinct status markers for completive and incomplete of root transitives" (Kaufman and Norman 1984:101). Robertson (1992:174-176) also described this progression from Ch'olti' incomplete and completive to the lack of overt morphological affixes for aspect in Ch'orti' as "surprising because leveling has left so few distinctions in the modern language." It is indeed true that normally one would go along with what is attested by the clear majority of the daughter languages when doing comparative linguistics in cases like this. However, this is another case for which the resurrection of the real parent as opposed to the creation of a reconstructed parent should be given more weight. It has provided data that supercedes majority rule.

Much of the data and analysis provided in this study has been presented to point in precisely the opposite direction from what had previously been taken in regard to aspectual forms in Ch'olan. The data from Classic Ch'olan indicate that it was the majority that must have innovated. It was not Ch'orti' that leveled the nominalizations that are attested in all the other Ch'olan languages except for Classic Ch'olan. That conclusion was clearly the best one according to the usual comparative-linguistic

standards. However, because Classic Ch'olan is, as has been argued here, the unreconstructed parent language of all these Ch'olan languages, any theory as to how this situation occurred has to start with the verb morphology of the Classic Period texts. For that reason, it seems very unlikely that the Ch'orti' verb system went through the same stages as Ch'olti'. Ch'olti' preserved the Classic Ch'olan morphological forms in the completive, but then, along with the other two Ch'olan languages, innovated by employing nominals to use as incompletive inflection.³⁶⁷ It seems highly unlikely that Ch'orti' would have reverted back again to the previous Classic Ch'olan forms after having already switched away from them earlier in its history.

Although he would likely not agree with the main conclusions reached in this study, Robertson (1992:174, emphasis added) described a situation for transitive verbs in Ch'orti' which is quite interesting:

Thus, in today's language the Ch'orti' speaker can say

in-šur-i akb'i 'I cut it yesterday'

in-šur-i sahmi 'I cut it today'

in-šur-i ehk'ar 'I cut it tomorrow'

where the **tense/aspect distinction is only syntactical (adverbial) and not morphological.**

Of course, there is **no tense/aspect distinction** being made here at all by these adverbs. As explained earlier in detail, narrative temporal marking and control by means of adverbs is **by definition** not "tense" or "aspect" at all. These examples do, however, provide very good examples of supplying temporal information by means of adverbs, context, and discourse markers used to accomplish what is provided by grammaticalized tense and/or aspect morphemes in many other languages. That is almost exactly what I have been proposing for Classic Ch'olan. So this is not new at all. It is what has been

³⁶⁷Yukatekan adopted much the same method for creating incompletive aspect forms.

preserved by Ch'orti' from Classic Ch'olan although it has only been partially preserved by Ch'olti'.

Where Ch'orti' did innovate was with the intransitive verbs. It was able to both preserve the Classic-Period legacy of verb forms uninflected morphologically for present-past tense or incomplete-completive aspect by developing the new set of dependent pronouns as already mentioned. This provided the newly required aspectual distinctions for intransitive verbs by prefixing Set C pronouns representing the subject without either prefixing ergative (Set A) pronouns, adding special suffixes, or recruiting gerunds to accomplish the task. This issue also raises a related topic that is important especially for the Mayan languages that have been traditionally viewed as closely related to the languages of the Classic-Period texts, that of split ergativity. That topic will receive more detailed comment in the next section, but is worth a brief comment here. If the analysis that has been presented so far is correct, the question concerning split ergativity in the language of the Classic-Period texts has become moot. There cannot be any examples of split ergativity of the type usually expected in Classic Ch'olan because there is no morphological or syntactical distinction between incomplete or completive aspect or present or past tense on the verbs in the classic period texts.

9 Language Change

9.1 Theoretical Aspects

9.1.1 Structural Anthropologist on Scientific Nature of Linguistic Analysis

Claude Levi-Strauss is well known for his structural approach to societies and their cultures. He had an especially optimistic view of the scientific nature of linguistic studies.

Among all social phenomena, language alone has thus far been studied in a manner which permits it to serve as the object of truly scientific analysis, allowing us to understand its formative process and to predict its mode of change. (Levi-Strauss 1963:58)

He attributed this mainly to two characteristics of language as a social phenomenon. “In the first place, much of linguistic behavior lies on the level of unconscious thought” (Levi-Strauss 1963:56). Second, he noted that there is in some languages a long availability of written documentation. Thus he saw two of the most important qualifications for scientific study fulfilled, that is, “independence of the observer and long statistical runs” (Levi-Strauss 1963:57). He even envisioned the whole enterprise, from phonology, to grammar, to historical linguistics, capable of being turned over to computerized analysis.

If all of these [structural] modalities [of the same language] could be analyzed by our machine, established mathematical methods would permit it to construct the “metastructure” of the language, which would in certain complex cases be so intricate as to make it difficult, if not impossible to achieve on the basis of purely empirical investigation. (Levi-Strauss 1963:58)

Of course, even though great technological strides have been made since the time this was written by Levi-Strauss, few linguists would share the opinion that one could predict mathematically for a language “its mode of change.” Also, although computerized translations have improved as well over time, no one who has read a text of much length or complexity translated into one’s own native language would conclude that even that task has been adequately accomplished.

9.1.2 Some Linguists’ Views on Nature of Linguistic Analysis

Less confident and more experienced linguists such as, for example, Hopper and Traugott (2003), have a different view. In their summary of the accomplishments of one field of linguistics which has made much progress over the last two decades, they characterize it in this way: “Indeed, the study of grammaticalization can be understood as an attempt to disprove the assumption that changes resulting in grammatical forms are completely random and unpredictable” (Hopper and Traugott 2003:232). They continue with a more general statement applicable to all types of language change:

It follows that all change, including grammaticalization, must be thought of in terms of tendencies, not absolutes. Because speakers may preempt elements of language for social purposes, because most societies have complex mixtures of linguistic populations, and because patterns of grammaticalization may be renewed, reconstructions based upon an assumption of unidirectional match (“isomorphism”) between cline and direction of change in a specific instance should be made with caution and should be framed as testable hypotheses. (Hopper and Traugott 2003:232-233)

In a long and influential article devoted to the practice of comparative linguistics, the authors Kaufman and Norman (1984:77) note that “In cases where the comparative method has been subjected to empirical test (typically through the discovery of previously

unknown written languages), its results have usually been confirmed, sometimes with a high degree of accuracy.” Nevertheless, they also continue by pointing out that

The most serious limitation of the comparative method is that it does not enable us to specify all the characteristics of an earlier linguistic stage, but only those that have survived in the daughter languages in such a way as to leave no reasonable doubt that they were present at the time level under consideration. Some features of the ancestral language may have disappeared without leaving any recognizable trace in the daughter languages; others may have survived in one or more daughter languages, but not in such a way as to provide clear evidence that they were in fact present in the proto-language. Thus, the ancestral language reconstructed by the comparative method is incomplete and hypothetical Therefore we should bear in mind that, in the languages for which Maya writing was devised and to which it was applied, there must have been words and grammatical patterns that we cannot reconstruct or whose features we cannot completely describe.

(Kaufman and Norman 1984:77)

9.1.3 Some Preliminary Comments on Ch’olan Reconstructions Versus Epigraphical Findings

Indeed, despite the large number of reconstructions both lexical and grammatical that their work on Proto-Ch’olan produced, there were indeed several that were not included, precisely because of the reasons Kaufman and Norman cite. Both the transitive and intransitive active resultatives described earlier no longer exist in any of the surviving Ch’olan daughter languages despite their active use in Classic Ch’olan. Although Classic Ch’olan is an actual and not a proto-language, it must still be recognized as either a direct ancestor or a very close earlier relative of all those Ch’olan languages. In either case, the resultative aspect is present in it. Its presence in both Tzeltal and Tzotzil indicates that it would have to be reconstructed back to the time of the Ch’olan-Tzeltalan split since it

was undoubtedly carried on from Greater Tzeltalan times rather than innovated independently by Classic Ch'olan. The use of the *-ijiiy* ∞ *-iiy* enclitic attached to verbs was also not predicted despite the evidence from Acalan Chontal, but it too is attested in that capacity in Classic Ch'olan. Nevertheless, as an enclitic, that possibility always remained open. Some words, such as *ukab'i* (or *uchab'i*), in the meaning “oversee, guard” are also not attested in any of the daughter languages although it is attested in Tzotzil and Classic Ch'olan.

There are also examples of grammatical patterns that have been reconstructed, but which may not have actually existed in a parent language. That is, of course, what is being argued in this study in the case of the incompletive aspect morphology. But how is it theoretically possible to argue against reconstructing it despite attesting very similar incompletive aspect morphology in all but one of the Colonial and Modern Ch'olan languages? Within a strictly structuralist concept of linguistic change one probably could not. However, such a Levi-Straussian view is not shared by all. Thomason and Kaufman (1988) agree that not all language change is encompassed by or explicable through internal linguistic forces. For them,

the history of a language is a function of the history of its speakers, and not an independent phenomenon that can be thoroughly studied without reference to the social context in which it is embedded. We certainly do not deny the importance of purely linguistic factors such as pattern pressure and markedness considerations for a theory of language change, but the evidence from language contact shows that they are easily overridden when social factors push in another direction.
(Thomason and Kaufman 1988:4)

Thomason and Kaufman (1988:35) go on to note, “Both the direction of interference and the extent of interference are socially determined; so, to a considerable degree, are the kinds of features transferred from one language to another.”

9.1.4 Borrowing of Structural Patterns

The types of changes that have been suggested in this study for the descendants of Classic Ch'olan involve more than just vocabulary or morphological affixes. The issues that have been raised concern whether basic structural changes to the verb system of a language can be borrowed. In that case Thomason and Kaufman (1988:37) still insist:

If there is strong long-term cultural pressure from source-language speakers on the borrowing-language speaker group, then structural features may be borrowed as well – phonological, phonetic, and syntactic elements, and even (though more rarely) features of the inflectional morphology. Although lexical borrowing frequently takes place without widespread bilingualism, extensive structural borrowing, as has often been pointed out, apparently requires extensive (though not universal) bilingualism among borrowing-language speakers over a considerable period of time.

Actually, the change that is under consideration, the development of incomplete aspect marking, is really not, or does not need to be, considered extensive. No new or unknown forms were borrowed although gradually, the forms took on a different meaning. From a different viewpoint, however, it signaled a radical structural difference in the way verbs performed in the languages. Just what type of changes actually took place and the relationship of the new structures to those which previously existed will be considered in more detail later.

Yoshiho Yasugi (1995) offers an example from a Mayan language of a structure being borrowed that by comparison might help to explain how such a change could take place. He notes that some changes in numbering systems have occurred in Mesoamerica, in which the words used have stayed the same, but the principles of number formation have been borrowed from the dominant Spanish language culture.

Cakchiquel provides a typical example of this phenomenon. Classical and modern Cakchiquel use almost the same vocabulary in the numbers from 61 to 99, but the formation pattern of these numbers is different. Classical Cakchiquel used the overcounting method for the numbers from 61 to 80, and the base *muč'*, meaning 80, was utilized for the numbers from 61 to 80. On the other hand, modern Cakchiquel uses *muč'* from 80 to 99, obviously with the undercounting method. Here we can see that only the formation principle is borrowed, whereas the vocabulary is identical. (Yasugi 1995:155)

This type of borrowing as evidenced by a change in the structure of the Kaqchikel numbering system is likely similar to what transpired in the case of incompletive and completive aspect as well. The actual vocabulary and morphological shapes used in the new structures were native to these languages. What is more, as will be suggested later, in the beginning, the structures themselves could have been used in much the same way in those languages without the new interpretation. However, what would have been new was the underlying principle of marking features such as incompletive aspect on the verbs themselves. Instead of each element in the construction working independently, they may have been incorporated instead into the verbal complex. This may have been barely recognizable as such early on. Indeed, the functions such as incompletive aspect and progressive mood may have been recognizable at first only through examination of a later stage of development. Later in these languages, both tense and aspect, and various combinations of both, might have come to be marked on verbs either through affixes, auxiliaries, or particles. The evidence presented in this section will be neither detailed nor extensive enough to uncover definitive signs of what might have led from the verb system of Classic Ch'olan to the development of the systems present in its immediate descendants, the members of the Ch'olan language family. However, examination of a few forms might allow one at least to entertain the possibility that the Spanish occupation forces and proselytizing missionaries might have had a significant effect upon its

development. Further, that many of the Maya speakers – and especially those in positions of influence – began to speak the language of the newly dominant culture alongside their own would have likely also had an effect upon how they spoke their own languages. Over time, the verb system in these languages could well have taken on even more characteristics of that second language.

9.1.5 The Time Question Again

Thomason and Kaufman (1988:37), as noted above, state that “extensive structural borrowing . . . apparently requires extensive (though not universal) bilingualism among borrowing-language speakers over a considerable period of time.” This requirement was likely fulfilled in the Maya area before some of these languages had been adequately recorded. But was there enough time for this to have begun happening by the time languages such as Acalan Chontal and Ch’olti’ were written? Acalan Chontal was recorded in a document dated to 1610 to 1612 by Chontal Maya with knowledge of Nahuatl and Spanish, over 100 years after Columbus encountered Maya traders in a canoe off the coast of Yucatan, although portions of this text were likely recorded about 50 years earlier. Even more time had elapsed until some parts of the Ch’olti’ document were written by a Spanish friar sometime after 1618 with the rest prepared by others around 1685 and 1695. Although this is not a long time in terms of language change, it may have been enough time for a change in the fundamental approach to expressing time and aspect in discourse. Also, there are signs in those documents that the structures still resembled very closely similar ungrammaticalized forms that were present even the Classic Ch’olan. Many elements that were already present in the language needed only to be interpreted in slightly different ways. There is evidence that the Spanish linguists sometimes exaggerated similarities to Spanish or Latin structures. They appeared very eager to identify supposed grammaticalized verbal structures that mirrored almost precisely those that existed in either Latin or Spanish.

Also of note, if Dixon's (1997:67-96) and others' theory of punctuated equilibrium is correct, languages by no means change at regular rates. A language may go thousands of years with very little change, but then because of some unusual environmental, social, or political events, it may undergo rapid change. It may also borrow extensively from more or less distant members of its own language family or even from unrelated languages. Finally, this borrowing may have long term effects especially upon the subordinate language.

Dixon and others have noted that the type of change alluded to by Yasugi is actually not rare. It is also of the sort that may be exemplified in the development of incompletive and completive aspect in the Ch'olan languages. In fact, after lexical items, borrowing of grammatical structures is among the most frequently encountered types. An example of this presented by Dixon is that of Tariana spoken in the area near the Vaupés River on the Colombia/Brazil border. It has borrowed extensively from more prestigious Tucanoan languages.

Interestingly there have been almost no lexical borrowings. . . . Tarian has remodeled its modality, tense-aspect, and evidentiality systems, to be more similar to those in Tucanoan. (All of these changes involve the organization of the grammar; no grammatical forms have been borrowed). (Dixon 1997:24-25)

Note that it is not the "grammatical **forms**" or affixes which were borrowed. All of the morphemes and lexemes were native to Tariana. Only the structures, the way of expressing mood, tense, aspect, and evidentiality were borrowed. It is the possibility of this type of borrowing that is being proposed here in regard to the aspectual systems of the Ch'olan languages.

9.1.6 Narrower View of Language Change and Broader View of Reconstruction

In contrast to the views of language change just examined, the arguments that have been presented by Houston et al. (2000a) for the exclusivity of Ch'olti' as the immediate descendant of the language of the Maya hieroglyphs may depend in part upon a limited and strictly traditional view of language change. If all languages changed at a regular pace over long periods of time, then it would follow without doubt that the language most similar to the target language, whatever that may entail, would be the most direct descendant. The ancestors of others would have either broken off earlier from the family, and so would be sisters of the target language, or they would have to be direct descendants of that exclusive daughter and so have had more time to change.

As to which criteria can be included in the list used to rule language family members in or out as descendants, Houston et al. require only two morphemes. The lack of those two derivational morphemes, as has already been discussed in Section 8, is the foundation for the argument they make for ruling out Colonial Acalan Chontal as a direct descendant. The absence of these two morphemes suffices despite the evidence of passages, which in terms of lexicon, morphology, and grammatical forms could have been taken almost directly from a Classic-Period monument (cf. Jorge Orejel 1992). Other similarities, such as discourse patterns, parallel uses of adverbial clitics, and other adverbs not attested in any of the other family members including the supposed sole direct descendant, Ch'olti', also do not dissuade them from this judgment. Faced with a demonstration of those discourse patterns, they did, however, adjust the departure date of Chontal from the family group. However, they still did not allow its supposedly separate ancestor to play a role in the Classic Period texts except for one lexical morpheme which they surmise “percolated” up and spread throughout most of the Classic Ch'olan area.

The arguments against another family member, Ch'ol, being a direct descendent are similar although an additional 400 years had passed between its documentation and the earlier documentation of Ch'olti'. It has already been noted earlier that Ch'ol would

seem to have done a better job than Chontal of preserving one of Robertson et al.'s (2004:334) two "required" derivational morphemes, *-h-C-aj*. It is still in use with the same function and meaning but without the final *-aj*. That lack of the second portion of the morpheme was used by Robertson et al. to rule out Ch'ol as a direct descendent. Instead they ruled that the etymology of the morpheme in question came from a completely different source, one much earlier in history which performed precisely the same function but lacked the second part. That the second portion of that morpheme, *-aj*, could have been dropped or altered in the 1000 years since the last text of the Classic Period was written, is not even considered worth mentioning as a possibility. That a parallel replacement of part of a different suffix, *-l-aj*, which had a second part of the same shape and in which that part likely had a similar function, that of being a thematic intransitive suffix or intransitivizer, was also not considered worthy of consideration.

What is more, the occurrence of two major catastrophic events, the collapse of the polities in the southern lowlands and the invasion by the Spaniards, does not seem to be taken into account as a possible reason for rapid change in the language. These events directly and severely impacted the speakers of those languages and therefore also the language history of Ch'ol, Chontal, Ch'olti', and Ch'orti' during that millennium. There is evidence of relocation of many groups of people during both of these cataclysmic events. Despite Robertson et al.'s own repeated statements that Ch'ol seems to have undergone more change than any of the extant Ch'olan languages, a partial change in this one morpheme is not even suggested as a possibility. Finally, the known history of especially the Ch'ol speaking population is one consisting of extensive relocation as a result of the Spanish invasion (cf. Hopkins 1985:4-5). It must also be taken into account when evaluating the likelihood that certain changes might have taken place.

An approach which ignores evaluating the possible effects of major historical events would seem to be an example of a method of which Levi-Strauss would be proud since there is no allowance at all for the possible effect of social conditions on the state of the languages themselves. The difference, however, is that Levi-Strauss envisioned the

consideration of so many criteria and complex relationships in making such decisions that a computer would be needed to get an adequate picture of the “structural modalities.” As already discussed in detail, Houston et al. (2000a) required only two morphemes to provide all the evidence they thought was needed to prove that Ch’olti’ was the only immediate descendant of Classic Ch’olan (their “Classic Ch’olti’an”).

9.2 Applying Change Theory to Ch’olan Languages

9.2.1 Likely Impetus for Change Among Ch’olan Languages

In light of this overview concerning theories of language change, it should no longer seem unusual to suggest that both external and internal forces were involved in the changes that took place in the Ch’olan languages between the time of the last text written in the Southern Lowlands and the first evidence of their existence in the Colonial Period. As regards the impetus for the introduction of the distinction between the incompletive and completive aspect, I suggest that both language internal and external forces were involved. I have suggested that one possible immediate external impulse for changes in the verbal systems of the Ch’olan family members was the influence of the Spanish language. Although the history of each of these languages during the early Colonial Period will not be presented here, the impact of the language of the Spanish military occupiers had to be quite large. Their impact was followed by that of clerics including those of linguistic bent who were charged with preparing dictionaries and grammars for use in proselytizing. It was incumbent upon them to explain the languages in a way that allowed translations of prayers, confessionals, scriptures, and more to be understood and accepted by the native speakers the Mayan languages. The acceptance of the message of these clerics and the new governors of their territories required eventual participation of many Maya in accepting, to varying degrees, both the new religion and the new language.

As far as the Classic Ch’olan system is concerned, the use of adverbs, dates, and verb forms other than those inflected for incompletive or completive aspect (or present and past tense) should not be interpreted as having any negative effect at all on the capability

of either the language or the writing system to serve as tools to convey a variety of messages in a variety of ways. This is evident from the monumental texts on both the level of the discourse itself and in the interplay between the texts and the carved and painted images that they accompany (cf. Bassie-Sweet 1991; Wald 1997b). Among other forms, verbless sentences were used to address the observer in both identifying the person and the action in which the person was engaged. The same was also accomplished by verbal sentences naming the action depicted and the performer of that action. What is more, the narratives themselves, especially the longer ones, contained adverbial clitics, conjunctions, dependent pronouns, dates, and many discursive techniques used to relate events to each other and to direct the back and forth flow of the narrative. Sometimes attention was led from one event to another by a restatement of the account of a previous event in order to relate to the next and to turn the reader's attention away from it toward the next event. Even gerunds were used, albeit rarely, embedded within an ongoing narrative possibly to energize the description of an event as shown, for example, in Figure 286 above. Emphasis was injected by what has been called "disturbed syntax" by Josserand (1988; 1991; 1995; 1997), in which normal word orders were changed for effect. Sometimes the attention of the reader was directed by use of focus antipassive verbal constructions, grammatically engendered by fronting independent pronouns that replaced the usual dependent pronominal prefixes otherwise attached directly to the verb.

In all of these and many more ways, the narratives of the Classic-Period texts and the language and writing system they used proved themselves a match for any other. Using a system of signs different from modern systems and not employing grammaticalized aspect or tense did not hinder accomplishing these same goals. Nor did changes among the members of the descendent languages necessarily improve or diminish their capabilities. Nevertheless, changes always come and the Ch'olan languages were no different. Changes can come about due to language internal forces or from interaction with other languages. Practically speaking, most changes influenced by

other languages occur only through interaction with language internal structures and vocabulary.

As already explained, much of what follows concerning the possible influence of the Spanish language on the changes that took place within the verb systems is based upon speculation. The many differences between the Colonial and Modern Ch'olan languages, of which only a few will be addressed here, and the language of the Classic Ch'olan inscriptions are quite apparent. For some of these differences, I find it plausible to include as one possible impetus an external source, the Spanish language.

One of the main differences between the language of the foreign invaders and the language of the Ch'olan descendants of the Classic Maya was in its approach to verbs, including even the frequent lack of them in sentential expression. Similar to Diego de Landa (Tozzer 1941:170), who seemed able to conceptualize a writing system only in terms of an alphabet, many of the Spanish grammarians such as Morán (1935a) could only think of sentences in terms of verbs. In face of the lack of an explicit copula verb “to be,” Morán (1935a:7-8) still had to explain verbless sentences in terms of Latin “*sum es fui*” which he states was not explicitly present but was formed by suffixing “primitive pronouns,” which are now called “absolute” or “Set B” pronouns, to adjectives and nouns. Nevertheless, he finds all the basic tenses, preterite *utz en oni* “yo fui bueno antiguamente” “I was good in the past” and future *utz en ec'al* “mañana seré bueno” “tomorrow I will be good.” in addition to the default present *utz en* “yo soy bueno” “I am good.” Proceeding from there Morán finds the tenses represented on all the verb types as well.

Although neither tense nor aspect was marked morphologically on the verb in Classic Ch'olan, there was implicit and explicit pressure both from within and without upon the speakers of the Ch'olan languages in Colonial times toward the development of a verbal system that marked time and aspect syntactically and morphologically rather than adverbially and contextually. In other words, there was pressure towards a verbal system that bound temporal and aspectual differences more closely to the action word itself. The

languages had hypothetically been accomplishing this by means of adverbs, temporal indicators, discourse markers, and contexts just as in Classic Ch'olan. Up to that time, there had been no grammaticalized expression of “situation external time (tense)” for present or past or “situation internal time (aspect)” for incomplete or complete as Comrie (1976:5) defines them.³⁶⁸

Any development of grammaticalized tense or aspect, even if prompted and influenced by another language, would likely not merely copy from it. The changes in the verbal system of the Ch'olan languages may have received the impetus from the outside but would most likely have built upon what was available in those languages themselves. For that reason, the results obtained from that process could not be reliably predicted. Also, there was no guarantee that they would all take the same path nor end with the same results even though they all belonged to the same language family, Ch'olan, and were also descendants of Classic Ch'olan. Also, the external factors affecting the response of the speakers of each language and of the language as a whole were not the same.

9.2.2 Ergativity and Split Ergativity

One of the major verb system characteristics that all of these Ch'olan languages carried on from Classic Ch'olan was the quality of ergativity. The subjects of transitive verbs were treated differently, in this case represented by different dependent person markers, from the subjects of intransitive verbs and the objects of transitive verbs, which both were represented by the same set of person markers. In this study the terms “person marker” and “dependent pronoun” have been used interchangeably but are actually not quite identical in meaning. “Person marker” has been used to stress the characteristic that a marker of person is required in all sentences in Classic Ch'olan as well as in other Mayan languages. This is true whether a proper noun representing a subject or object is

³⁶⁸Of course as already argued earlier, there was grammaticalized expression of voice, mood, transitivity, resultative aspect, and more already present in Classic Ch'olan, just not for present and past tense or incomplete and complete aspect.

present or not, unlike, for example, the Germanic or Romance languages. Other than the unmarked 3rd person absolutive, the only exception is when an independent pronoun takes the place of a person marker. The use of the term “dependent pronoun” stresses that these pronouns are all affixes or clitics, that is, they do not exist as independent words but are always attached to other words.

The person markers or dependent pronouns attested so far in Classic Ch’olan are shown in Figure 314.³⁶⁹ The ergative set, also called “Set A,” are prefixes that attach to the front of transitive verbs.³⁷⁰ They are used to represent the agents of transitive verbs, usually abbreviated as “A”.³⁷¹ This set is also used on nouns to refer to the possessor. In some cases and at a certain level, this appears to reflect a similarity between the language’s view of the subjects of transitive verbs and the possessors of nouns.

Attested Dependent Person Markers			
	Ergative (Set A)		Absolutive (Set B)
	Precons	Prevoc. (' & h)	
1 st sing.	<i>ni-</i>	<i>(ni)w-</i>	<i>-een</i>
2 nd sing.	<i>a-</i>	<i>aw-</i>	<i>-at</i>
3 rd sing.	<i>u-</i>	<i>y-</i>	<i>-Ø</i>
1 st plur.	?	?	?
2 nd plur	?	?	?
3 rd plur.	<i>u-</i>	<i>y-</i>	<i>-Ø</i>

Figure 314. Attested Classic Ch’olan dependent person markers

The members of the absolutive set, also called “Set B” are either enclitics or suffixes in Classic Ch’olan and so attach to the ends of verbs. The subject of intransitive

³⁶⁹The expected 3rd person plural in *-oob’* for both Set A and Set B has not been attested. The suffix *-oob’* is attested several times on the independent pronoun but not on dependent pronouns. The first person plural of Set A has been attested as *ka-* by Victoria Bricker in the Madrid Codex but has not been attested in the Classic Period inscriptions.

³⁷⁰The ergative pronouns are classified as prefixes by Kaufman and Norman (1984:90). The absolutive pronouns are generally enclitics in the Mayan languages (cf. Kaufman 1989:Ch.3.A.1, p.19). However, Kaufman and Norman (1984:90) indicate that they have become suffixes in Ch’olan.

³⁷¹The abbreviation “A” here is not related at all to what is called the Set A dependent pronouns. The latter name comes simply from the first letter of the alphabet. It is followed by Set B and Set C in order.

verbs in this type of system, abbreviated “S,” are not usually viewed as agents since they are not usually explicitly acting on anything or anyone in these contexts. To this extent, they are similar to objects of transitive verbs, abbreviated “O.” For that reason, objects are represented by the same set of absolutive pronouns as subjects of intransitive verbs. Type A subjects normally tend to embody agency or animacy more than either S or O. It is that characteristic that plays a role in the latter two being represented by the same dependent pronouns in straight ergative systems.

Ergative systems are contrasted with accusative systems in which A, the subject of a transitive verb, and S, the subject of an intransitive verb, are treated in the same or similar way. O, the object of a transitive verb, is treated differently from A and S in accusative systems. Such systems tend to treat A and S in a way that emphasizes both types of subjects as agents or more animate compared to objects (O) which are normally the receivers of an action from a grammatical standpoint.

There are, however, verbal systems that attest split ergativity. Under certain conditions in such systems, S and O are treated the same and under others, A and S are treated the same. There are different ways that split ergativity can manifest itself. Generally in the Ch’olan and Yukatekan families, the split is governed by aspect, but there are other factors involved in some of the languages. Since the purpose here is to look for signs of how incompletive and completive aspectual marking may have originated from a system in which they were not marked, these differences will not be addressed unless they are relevant to that issue.

Robin Quizar (1994:122) describes the issue of what drives such splits in this way:

Typological research has indicated a tendency for a split between ergative and accusative morphological patterns to occur based on the tense/aspect of the verb, the activity of the predicate, and/or the relative animacy of the noun phrases (NPs) involved in the construction. . . . Ergative patterns are associated with verbs in the

perfective [completive] aspect or the past tense, with stative predicates, and with NPs low in animacy. . . . Accusative patterns tend to show up with verbs in the present tense or imperfective [incompletive] and progressive aspects, with active predicates, and with NPs high in animacy.

In the Ch'olan languages, the split is mainly governed by verbal aspect. As noted by Quizar, when splits based upon aspect occur, it is usually the incompletive and progressive forms that tend to exhibit accusative patterns. This is also the view of R. M. W. Dixon, who states:

In non-past tense or in imperfective aspect, nominative-accusative marking would be expected. Something that has not yet happened is best thought of as a propensity of the potential agent ('That man might hit someone', rather than 'That person might get hit by someone') [I]f a split is conditioned by tense or aspect, the ergative marking is always found either in past tense or in perfective aspect. (Dixon 1994:99)

At the risk of overstating Dixon's point, it seems that the difference here between incompletive and completive is based upon the openness toward agency that is present in the narration of an event or act without viewing it in its entirety, that is, one expressed in the incompletive. Incompletive aspect provides a view of an event from the inside as still going on, as existential, or as habitual. So it is not surprising that it is in the incompletive aspect that S, the subject of intransitive verbs, is treated just like A. Specifically, it is referred to by means of an ergative dependent pronoun. A report using the completive aspect tends to view an event or act as a whole and so is less suggestive of ongoing agency or potentiality. When the intransitive verb is in the completive, the subject of an intransitive verb is again treated just as the object of a transitive verb. That is, it is represented by an absolutive dependent pronoun.

This emphasis on ongoing agency or potentiality appears to be the theme reflected in Dixon's summary of conditions that serve as occasions for split ergativity based upon tense, aspect, or mood.

In summary, it will be seen that ergative marking is most likely to be found in clauses that describe some definite result, in past tense or perfective aspect. An ergative system is less likely to be employed when the clause refers to something that has not yet happened (in future tense), or is not complete (imperfective aspect) or did not happen (negative polarity), or where there is emphasis on the agent's role (imperative or hortative moods). (Dixon 1994:101)

Interpreted in a sense applicable to the situation within the Ch'olan language family, this means that S and A are most likely to be treated alike when intransitive verbs are inflected for the incompletive aspect.

9.2.3 Possessed Nominals or Progressive and Incompletive Aspect: Acalan Chontal

Although the incompletive form of intransitive verbs is derived from a nominal in Acalan Chontal, Chontal, Ch'ol, and Ch'olti', it is in the two Colonial languages that its origin is easiest to detect. In fact, especially in Acalan Chontal, but also sometimes in Ch'olti', it is not clear whether the form has actually been grammaticalized yet. Turning first to Acalan Chontal, here is one example among many others.

cahix utalel ahau paxtun - yithoc ucuchulob uçacan padre ya ta canpech

(Paxbolon et al. 1614:163.30-31)

It began the going of the lord Paxtun with his seated ones [his council] to seek out the Fathers in Campeche.

In this case, the form *utalel* might be interpreted as either a possessed nominalized intransitive verb, that is, a gerund, or as a verb inflected for incompletive aspect. Together with *cahix* they might be better viewed as an early, perhaps as yet ungrammaticalized, version of a progressive aspect construction.³⁷² This form in *-el* is found in Classic Ch’olan where it is indeed a gerund and certainly not part of a progressive construction nor is it an incompletive form, as has already been mentioned. It is also not likely that at this time the intransitive gerund in *-el* was completely grammaticalized as an incompletive in Acalan Chontal either.

<i>cahix utalel ahau paxtun yithoc</i>	[Original Chontal]
comenzó su venir rey <i>Paxtun</i> con	[Smailus’ literal Spanish translation]
[“ it began his coming, the king <i>Paxtun</i> , with”]	(English literal translation)]
Vinieron entonces el rey <i>Paxtun</i> y	[Smailus’ colloquial Spanish translation]
[“They came, then, the king <i>Paxtun</i> and”]	[(English translation of colloquial Spanish)]
(Adapted from Smailus 1975:75)	

Figure 315. Different approaches to the same passage by Smailus (1975)

Figure 315 shows two different approaches taken by Smailus toward the *cahix* passage just quoted. Usually Smailus translates these forms literally as possessed nominals. Only in his more colloquial translation does he translate them as active verbs. However, in doing so, he then most often leaves out any translation of the main verb here, *cahix*.

Although there is no direct proof that can be provided, one probably would not get the impression from this, the oldest extant Ch’olan language text written using an alphabet, that the form in *-el* had been in use as incompletive aspect for a long period, if it

³⁷²So if one wished to provide a **free** or **colloquial** translation into English, one could say “Lord *Paxtun* was going with his council to meet with the Fathers in Campeche.” However, this free translation does not match precisely the actual grammatical structure of the passage.

is indeed grammaticalized at all at this time. In fact, translating it as a possessed nominal seems to provide a better rendition of what is actually being expressed here. However, with knowledge of future developments and with hindsight, it is possible to descry that it is on its way to becoming grammaticalized as an incompletive form. There is little doubt that this was the way both the Spanish Friars and the Native writers in Acalan Chontal came to express the incompletive aspect.

But what about Robertson et al.'s comment concerning Acalan Chontal, its use of *yuual* and the supposed absence of any progressive aspect. They claim that from the standpoint of the progression of the progressive aspect, Acalan Chontal represents a much later stage:

In Acalan Chontal the process is further developed. The verb *iuual* is now detached from the construction and has become an adverb, so that the original syntactic construction is reduced to morphological affixation: ERG-verb *intrans* . *-el*, *u-tal-el*, "he comes" (Houston et al. 2000b:348; cf. also Robertson et al. 2004:280)

I believe that Robertson et al.'s analysis of Acalan Chontal's diachronic position in the development of incompletive aspect is fundamentally wrong. However, I agree that forms such as *utalel* do at times appear alone without *cahix* or *yuual* and that some of these may show signs of beginning to represent a stage further along the road to incompletive forms from being possessed nominals in verbless sentences, as for example, "it is/was the coming of." The form *utalel* could theoretically occur in Classic Ch'olan as a gerund although that particular word is not yet attested in that form. The gerund *hulel* "arriving" or "arrived" does occur in the form *hulelijiiy*. I also agree with Robertson et al. when they quote Comrie (1976:98 ff.) as noting that diachronically, the progressive most often does occur earlier and often develops into either incompletive aspect or present tense (cf. also Bybee et al. 1994:140ff. for even more detailed evidence).

However, I disagree completely with Houston et al.'s just quoted assessment which makes several different but related claims. One is the unstated assumption that the only way to form the progressive in the Ch'olan languages is with a reflex of *iwal*. First, *i wal* is attested as a conjunction *i* plus adverb *wal* already in Classic Ch'olan. Second, neither *i wal* or *wal* ever occur as part of any progressive form in Classic Ch'olan. Third, the meaning and function of *i wal* in both Classic Ch'olan and Acalan Chontal (*yuual*) are basically the same. In other words, the function and use of *iwal* **has not changed** substantially from Classic Ch'olan to Acalan Chontal. Instead, it is in Ch'olti', Tumbalá Ch'ol and Ch'orti' that *iwal*, *woli*, and *war* respectively have been recruited for use as part of a progressive construction. Fourth, an early form of the progressive aspect occurs fairly often in the Acalan Chontal document. It is just not always recognized as such by Robertson et al. (2004).

In contexts in which the identification of grammatical forms is under discussion, it seems clear that the best way to avoid misunderstandings is to rely on more literal translations. Experience has shown that, for example, if one translates a construction formed using ungrammaticalized adverbs, enclitics, and time-period nouns into English or Spanish grammaticalized forms, such as present or past-perfect morphemes, such translations are often taken as indicating the actual existence of those same forms in the original text or that one is implying that those verb forms are actually attested. In studies such as this which inhabit the border between epigraphy and linguistics, it is often better to sacrifice fluidity of expression in order to avoid prejudicing grammatical interpretation. That is why the translations in this present study of the various forms of *cahix* center around "it began." Thus *cahix utalel* is translated somewhat literally as "it began the coming of" or, even more grammatically precise "it began his/her/its coming" That is the basic meaning of the *cahi* and *cahix* and the forms in *-el* are gerunds. In this case, based upon the context and when the document was written, it may also be that this literal translation is perhaps closer to the mind-set of the writer of the document – but that

is, of course, a speculative judgment that is difficult to prove. Etymologically, the literal translation is certainly correct.

There are signs, however, that Smailus may have also sensed that this construction was at least on its way to becoming more than just an element of discursive style. His literal translation of *cahix* is usually as “comenzó” (“it began”) or a close variation of it (see, for example, Smailus 1975:80). However his colloquial rendition varies much more. He sometimes substitutes words such as “entonces” (“then”), “ahora” (“now”) or omits translating it at all. Even in his grammar section, where the emphasis is likely upon grammatical equivalents, he consistently substitutes “entonces” or “ahora” for variants of *cahi/cahix*. His lexicon provides the definition “ocurrir” “to happen” for *cah-el* although I have not located his use of this Spanish equivalent elsewhere in the text or grammar notes (Smailus 1975:149). Smailus’ (1975:80) colloquial translation of the gerunds accompanying this verb varies greatly in form although his literal translation often consists mainly of pronoun plus participle or infinitive for example: *caix yithocintel upetel nucuinicob* “comenzó el (sic) ser recogido todo(s) principales” “It began their being joined/gathered all the leaders.” A literal translation based more on the original Chontal might be “It began, its being joined, its totality (that is “all”) the big men.”

Indeed there are various words that have been recruited for use in progressive constructions. A verb or verbal noun based upon a positional root such as *wa*’ “stand” or “be in an upright position” is a good candidate for use in forming a progressive (cf. Bybee et al. 1994 128-129). As noted by Bybee et al. and Robertson et al. (2004:272), the etymology of auxiliaries and other markers of progressives is relatively often verbs of location or position. Also, it is likely that, already in Classic Ch’olan, *wal* represented an adverb meaning “now, then” that was derived etymologically from *wa’al*. So it is not unusual that reflexes of *wal* would have been recruited for a progressive construction. But *kah* “begin, start” is also a possibility for use as an auxiliary in a progressive or closely related inceptive or future construction as it actually is in Ch’orti’ and Ch’ol respectively.

An incomplete form employing the nominal portion of this construction could have been the previous stage in the development of the incomplete aspect form in Acalan Chontal. What I fail to see at all is evidence that *cahix utalel* is an example of a very advanced incomplete.³⁷³ There are other examples in which the gerund portion of this construction is used outside of a possible incomplete context. This occurs in examples such as *bixiobix ta ochel* . . . “él iba a entrar . . .” “He went for entering . . .” (Paxbolon et al. 1614:160:6). Here *ochel* is still viewed as a gerund, that is, as a derived nominal instead of an inflected incomplete. It serves as the nominal object of a preposition. Even in modern Chontal in examples such as this, the gerund is still open for consideration as such instead of as a verb marked for the incomplete (see Quizar and Knowles-Berry 1988:86). In other cases, such as *uyochel haa tupam uinic* “él entra agua a su cabeza hombre” (Paxbolon et al. 1614:164:7) “It was the entering of the water on his head, [the] man” it is possible to interpret *uyochel* as either an incomplete or as a possessed gerund. While I prefer the latter, a case could be made that it is indeed an incomplete form. The patterns in the Acalan Chontal document provide evidence more representative of a language that is just developing incomplete and complete as inflection on the verb than one which has progressed way beyond what is documented for Ch’olti’.

Further support for the view that Acalan Chontal represents a stage in the language that is just in the process of developing incomplete and complete inflection and perhaps progressive constructions comes from some passages that include *yuual* and possessed gerunds. Some passages include examples such as *yuual uhulel* (Paxbolon et al. 1614:169.22) “now it is/was its arrival.” This is formally the same pattern that Robertson et al., among others, identify as progressive aspect in Ch’olti’ “it is/was arriving” and which is identified as “presente actual” by Morán. Thus it is not true that clauses practically identical to what is elsewhere called progressive aspect do not occur in

³⁷³These clauses in Acalan Chontal are not the same as those presented by Quizar and Knowles-Berry (1988:81) for Modern Chontal which use a different verb meaning “to begin,” *kā tāk’e’ xe* “I begin to go.” In those clauses both verbs are in the incomplete and the second verb, the one in the complement clause, does not have the S subject marked on it.

Acalan Chontal. However, it seems that this particular form, although clearly attested in the language, never achieved grammaticalization to the extent that it did later, for example, in Ch'ol and Ch'orti'. Whether it actually had achieved that status in Ch'olti' among native speakers is also open to doubt. Because we have a text written in Acalan Chontal by a native speaker, we can compare such clauses and constructions with others in which *yuual* is also used with a grammaticalized completive form, as in *yuual huli* (Paxbolon et al. 1614:165.29). From such comparisons, one can then propose that *yuual* (*i wal*) in this and other similar contexts may just be an adverb or a conjunction-adverb compound with the meaning “now,” “and now,” “then,” or “and then.” We do not have the luxury of doing so in the case of Ch'olti'. Instead, all the information we have is filtered through the eyes and mind of native Spanish speakers.

9.2.4 Possessed Nominals or Progressive and Incompletive Aspect: Ch'olti'

9.2.4.1 Nature of Ch'olti' Source Material

The only source that is available for Ch'olti' is the *Arte y Vocabulario de la Lengua Cholti'* that was completed in 1695 although parts of it were probably written as early as 1625 and are attributed to Friar Pedro Morán. Of this source, Kaufman and Norman (1984:97) make the following assessment:

Although the manuscript contains a wealth of linguistic data, the nature of the source often makes the interpretation of this data rather problematic: we have here a work compiled by non-native speakers of Cholti whose command of the language was imperfect in an imperfect copy (there are many spelling mistakes even in the Spanish text) made at different times and places and probably representing different varieties of Cholti. The analysis presented here represents our attempt to form a consistent picture of Cholti grammar on the basis of an inconsistent source.

While in the Acalan Chontal document, the pressure to skew the interpretation of the verbal system as a whole comes mainly from more modern analyses of other Ch'olan languages, in the case of Ch'olti', the person, or rather, people who are presenting the language to us are, consciously or not, forcing us to view its verbal and other structures through the eyes of Latin grammar colored by a Spanish version of it. Even more problematic, the actual texts that we have to check out the reliability of their interpretations are almost all translations of prayers, confessionals, and rituals translated from Latin or Spanish into Ch'olti'. With that in mind, even the ritual texts, but especially the grammatical interpretations of the language, have to be approached with caution. The texts represent attempts to formulate Ch'olti' equivalents of Latin and Spanish texts in a way that will make them understandable to Ch'olti' speakers. They should not be approached as a priori reliable examples of how native Ch'olti' speakers would have expressed themselves in their native language. The grammar was likely written to help Spanish speaking clerics learn the language well enough to communicate, to conduct prayers and rituals, and to translate texts into Ch'olti'. Considering those purposes, the Colonial grammarians' own structural analysis is even less likely to be reliable. The categories have to be taken first and foremost as Spanish ones and must be often reinterpreted to arrive at a more accurate picture. That situation itself provides one of the more obvious reasons why the language of the Classic-Period inscriptions should not be named after it. However, if one keeps these limitations in mind, the data provided from Ch'olti' is still a very important resource.

9.2.4.2 Formation of Morán's "Present Tense" in Verbless Sentences

When undertaking an analysis of the verbal system of Ch'olti', the Spanish grammarians begin by explaining how to form the basic tenses: present, past, and future as well as the imperative and optative. To form the past or future, one has to add a "particula de tiempo" a "temporal particle." Thus for the past in these verbless sentences, one uses the "particle" *oni* and for the future *ec'al*. Thus "*utz en oni* yo fui bueno

antiguamente” (Morán 1935a:7) “I was good in the past.” This is accompanied by the statement “Siempre se hace el pretérito con aquella particula *oni*” “The preterite is always formed with that particle *oni*.” Prior to this, they have already referred to what would otherwise be interpreted as suffixes, such as *-V_ll* on adjectives, as “particles.” In this way the distinction between such suffixes and adverbs is blurred from the start. The term “particle” is usually defined in modern linguistics as “a term used in grammatical description to refer to an invariable item with grammatical function” (Crystal 1991:251) . In other words “particles” are included among the class of grammatical morphemes (cf. Bybee et al 1994:2). This problem is compounded when the term “particle” is actually used to refer to these morphemes by modern linguists when explaining Ch’olti’ grammar (cf. Fought 1984, Sattler 2004). In doing so various independent lexical items, especially adverbs, have been implicitly classified as grammaticalized morphemes prior to any in-depth grammaticalization analysis. If taken seriously, *oni* and *ehk’al* would have to be analyzed as tense inflection in verbless sentences. Of course, few if any would explicitly venture that far.

There are some linguists who do use the term “particle” in a broader sense. Knowles (1984:217) in her descriptive grammar of the San Carlos dialect of Chontal Maya defines them this way:

Particles are words which are never subject to inflection or derivation, but may be compounded. They may be classified according to their function in a sentence. In Chontal, most particles are either adverbial or syntactic.

The problem with this usage is that simply classifying a morpheme as a particle in this sense avoids clarifying precisely the question that is crucial for arriving at answers to the questions being asked here. Knowles (1984:217-237) is indeed careful in breaking the classification “particles” down into “independent adverbs,” “dependent adverbs,” and “aspectual particles” thereby providing the precise clarification needed. However, some

who do not take this next step seem to refer to the morphemes in question both as adverbs and as grammaticalized morphemes. This is sometimes reflected in a broader use of the term “marker” as in “aspect marker” or “tense marker” in referring to what are otherwise simply adverbs, thereby seemingly implying that an adverb can serve synchronically as both an adverb and a tense or aspect marker simultaneously in precisely the same example (see Robertson et al. 2004).³⁷⁴ Sometimes this analysis is conditioned by the appearance of these morphemes, or shortened versions of them, in the related modern languages. The distinction between synchronic and diachronic analysis therefore becomes blurred making a clear analysis and classification of particular morphemes impossible. The problem is that this lack of terminological exactitude prevents the possibility of recognizing clues that point toward the existence of an immediate ancestor that did indeed **not** mark present-past tense or incomplete-completive aspect on verbs with either morphological affixes or any other type of grammaticalized morphemes (“grams”).

When Morán (1935a:7) speaks of forming a so-called “present tense” using verbless (copulaless) sentences, he simply takes them out of context and adds nothing further to the noun and the attached absolutive pronoun as in *utzen* “yo soy bueno” “I am good.” For the present purposes, it is critical to note that these sentences exhibit neither incomplete and completive aspect nor present and past tense. What is more, there are no temporal indicators of any other kind either in this particular form. Instead, the temporal information would have to come from another word such as an adverb or from the context, which, as a grammarian, Morán had already removed. To this extent,

³⁷⁴One example among several is illustrated in these two contiguous statements: “The Common Mayan adverbial markers of tense, **ix*, ‘recent past’, and **-eey*, ‘past’, both figure prominently in the tense/aspectual history of the Mayan languages. In the Q’anjob’alan, Mamean, and K’iche’an languages the tense marker **ix* became a verbally inflected tense/aspect” (Robertson et al. 2004:267). Just the phrase “adverbial marker of tense” alone is self-contradictory or at the very least removes completely the distinction between “adverbs” and “markers of tense.” If it is adverbial, it is not tense. If it is a tense marker, it is not an adverb. Losing that distinction makes the terms “tense” and “adverb” devoid of any value for synchronic analysis. Even if the passage itself is referring to diachronic analysis, once an adverb is used as a tense marker, it ceases to be an adverb in that same context or, at least, in the same instance. Therefore “adverbial tense” is meaningless in diachronic analysis as well.

Ch'olti''s use of verbless sentences seems to parallel exactly the usage of this type of sentence in Classic Ch'olan, not to mention in all of the other Ch'olan languages as well.

However, there is more than just the grammarian's quest for abstraction at work here. Although Morán assumes the present tense when these lexemes are taken out of context, he calls for the addition of an adverb *oni* to form the preterite as in *utzenoni*.³⁷⁵ In other words, when explaining the preterite or "past" form, he adds the necessary context, in this case, an adverb. It seems then, that Morán has made the decision that the default temporal context in verbless sentences is the present tense. What he does not seem to be aware of, is that only the context or some additional lexeme such as an adverb or a noun, a date for example, can provide any temporal indication at all. What is more, there is no present or past tense included in these circumstances at all, but simply contextual or lexical temporal indicators. Morán's approach is, of course, understandable since his mission is clearly to inform educated Spanish speakers how to express themselves in Ch'olti' and not to write a grammar using analysis that is tailor-made or even well-suited for the Ch'olti' language.

It is important to note that the adverb *oni* is made up of an adjective *on* and the adverbial enclitic *-i*, a reflex of the enclitic *-ijiiy* ∞ *-iiy* that has survived from Classic Ch'olan, not only in Ch'olti', but in all of the Ch'olan languages. What is more, it is also important to note that such copulaless sentences, sometimes called "stative sentences" by epigraphers, provide an insight into how all sentences both with and without verbs express time and temporal relationships in Classic Ch'olan. If it is possible for verbless sentences to function perfectly well without morphological or syntactical tense or aspect and provide for clear communication and expression of time and temporal relationships between events, then why would it not be possible to use the same strategies in sentences that include verbs? Verbless sentence construction provides the easiest path to

³⁷⁵Note that the 1935 version of the *Arté en lengua choltí* divides the dependent pronoun from the noun and the adverb from the dependent pronoun as in *utz en oni*. However the older version (Morán 1695:15) combines them all in one as *utzenoni*. Since the new version is an edited copy of the older and since combining them would also be a better match with the style of the Acalan Chontal document, I have combined them as well.

understanding how these languages really behaved temporally and aspectually before the drastic influence of the Spanish Friars and their Spanish language changed all of these Ch'olan languages permanently. Nevertheless, the way that Morán approaches sentences with verbs actually reveals more than one might at first suspect if one simply pays attention only to section headings such as “Presente,” “Preterito,” and “Futuro.”

9.2.4.3 Formation of Morán's “Present Tense” in Sentences with Verbs

The way Morán approaches what he calls the “present,” and which others might instead call “progressive” or perhaps “incompletive” constructions in Ch'olti', is surprisingly similar to the way he approaches the verbless sentences. In reviewing the “verbos activos,” his term for transitive verbs, Morán again starts by turning first to the present forms: “El presente se hace anteponiendo a la simplicidad del verbo esta partícula *yual*, la cual significa actualid” (Morán 1935a:9). “The present is formed simply by placing in front of the verb the particle *iwal*, which means present time.”

This way of describing the formation of the present tense of transitive verbs is almost exactly the way Morán described the formation of the preterite of verbless sentences. In that case one simply added the “particle” *oni* after the verb, and in this case one simply adds the “particle” *iwal* before the verb. In both cases these “particles” are adverbs. A look at how he translates an example of a transitive verb in the present reinforces his view of the word *iwal* as an adverb, rather than as a grammaticalized verbal construction. Thus in writing “*yual inch'ohben Dios*, actualmente amo a Dios,” “now/at-the-present-time I love God,” he explicitly includes an adverb in his Spanish translation (Morán 1935a:9). By doing so rather than simply using the Spanish present tense or present progressive aspect, Morán reinforces the argument that he indeed viewed *yual* (*iwal*) as an adverb rather than as a grammaticalized construction. One could, of course, simply decide that Morán was wrong in his interpretation and that it should instead be interpreted as grammaticalized progressive aspect. However, the evidence indicates that making this distinction might not have been that easy.

Later, Morán explains the present of intransitive verbs in a similar way. The “present” is formed by preceding the verb with the adverb *iwal*. Thus, for example, “*iual invixnel. actualmente me voi*” (Morán 1935a:21) “now/at-the-present-time I go.” In most of the examples throughout the *Arte*, when the “present” is translated, the adverb “actualmente” is added. Only when listing many examples is it sometimes left out. Again, the evidence indicates the adverbial nature of the lexeme *iwal*.

In presenting the evidence concerning *iwal* and its interpretation, another important point has been postponed. In the English translations of the “present” forms, I have been intentionally providing the equivalents of the Spanish translations and not of what the Ch’olti’ originals might actually reflect in a literal translation. In the case of both the transitive and intransitive verbs, the verb form itself is actually a nominalized form. That is, both *ch’oben* and *b’ixnel* are gerunds, at least etymologically, and likely still actually are gerunds in early 17th Century Ch’olti’. What is more, the gerund forms in *-Vn* and *-el* are attested in Classic Ch’olan. Both parts of these constructions, *iwal* and its accompanying forms are also attested as an adverb and gerunds in Classic Ch’olan.

Thus *yual in ch’ohben Dios* could also be translated literally as “now [it is] my loving God.” “*iual in vixnel* could be literally “now [it is] my going.” Another example from Morán (1935a:20-21): “*yual uuanel c’a mi*” “now [it is] the sleeping of my father.” These translations reflect exactly how one might literally translate verbless sentences. Since what is written is basically an adverb and a possessed noun, there is no reason at all, except perhaps knowledge of how these constructions later became grammaticalized, that they should not be translated in that way. Whether or not these forms were actually grammaticalized already in 1625 or perhaps by 1695, these literal translations still reflect clearly the etymological sources and basic meanings of both *iwal* and the possessed nominalized verb form. There are other more complex sentences in which the nominal character of forms such as these is even more evident although not reflected in Morán’s (1935a:13) translation. One example is: *Yual incana imtanzen inuakach*. “quiero matar mi gallina.” The English equivalent of the Spanish translation is “I want to kill my hen.”

However, what the Ch'orti' original actually states is literally: "Now I want my killing my hen" or perhaps "Now I want my killing [of] my hen."

9.2.4.4 Comparison of Ch'olti' Forms with those of Acalan Chontal and Classic Ch'olan

The examples from Ch'olti' should also be compared directly with those in Acalan Chontal, some examples of which have been included in Section 9.2.3. When translated literally, it is even more evident how close these forms are in both languages. In each case, the nominal origin of the forms in *-n* and *-el* is very apparent. They may have even been implicitly understood by native speakers as gerunds at the time the examples here in Ch'olti' were recorded or when the native Chontal authors wrote the Acalan Chontal document. In any case, if grammaticalized at all at the time of writing, the adverbial quality of *iwāl* (*yuuāl*) and the nominal quality of the gerund forms imply a recent past at which time they were not. Both constituent parts of these constructions are attested in Classic Ch'olan although they not used together in this way. Both are also attested in Acalan Chontal. Although Acalan Chontal does not usually use *iwāl* in these contexts, it does use the verb root *cah* (*kaj*) in various forms along with gerunds to form very similar constructions.

One thing that is clear from this evidence from both of these Colonial languages is that the nominal forms do not find their etymology in the progressive aspect or Morán's present tense. Rather, the grammarians find the equivalent of the progressive aspect or present tense ("actualmente") in these forms. However, it is abundantly clear from the Classic Ch'olan texts that the nominal forms preceded both the progressive and the incompletive aspect and Morán's present tense. But there is no similar progressive or incompletive aspect of this type in all of the Classic Ch'olan texts. Only the nominal forms are found in Classic Ch'olan. How then can one attribute these grammatical forms to the language that is written in those texts. What later becomes "present tense," progressive aspect, or incompletive aspect, is created directly out of adverbial and

nominal forms present in Classic Ch'olan. Since this is the case, these forms had to originate at some point **after** the Classic texts were written. The character of these forms in both Chontal and Ch'olti' hints that these forms are of very recent origin indeed. There is no need to reconstruct unattested grammaticalized forms in Classic Ch'olan to account for their presence.

Data from the verbal systems of the Colonial Ch'olan languages correspond well with the evidence that there were no grammaticalized morphemes for either tense or aspect in Classic Ch'olan. The lexemes that were passed down directly as verb forms from Classic Ch'olan were those that eventually formed the basis of the verb systems of the Colonial and later of the Modern Ch'olan languages. For the parts of these systems that eventually developed incomplete-completive aspect distinctions, these formerly aspectually-unmarked forms served as completives. Because the past temporal enclitic was a sentential and not a lexical component on verbs, it was generally not carried over as an integral part of those verbal lexemes. Among the Ch'olan languages, it is attested in its traditional usage with verbs only in Acalan Chontal. Besides being used in the same way as in Classic Ch'olan, its shorter form was also recruited and grammaticalized to become an inflectional suffix marking the completive aspect.

The forms used for the incomplete aspect in three of the Ch'olan languages were not passed down as verbs. Instead, those used by the descendent languages for the progressive and incomplete aspects were newly created from gerunds. They were indeed present in Classic Ch'olan, but as gerunds and participles, not as aspectual forms. There is also indirect evidence that the move from straight ergativity to split ergativity may have been influenced by the selection of gerunds to form the newly minted incomplete aspect at whatever point it clearly emerged. This choice would have also had a direct bearing upon the use of ergative dependent pronouns to signal split ergativity. Because the ergative Set A pronouns are used to indicate possession and the nominal referent of such pronouns when present stands in that same relationship whether it is the possessor of the nominal or the subject of the verb, split ergativity is the inevitable result.

Especially in the Colonial-Period texts, deciding which of the two analyses is more accurate is sometimes difficult.

A related result that becomes more obvious over time is that the characteristics of a split-ergative system based upon incompletive-completive aspect as described above by Dixon are sustained. It is indeed in the incompletive aspect that the subjects of intransitive verbs are treated like the subjects of transitive verbs.

Based on internal linguistic analysis, not much more can be said at this point about why this method was used to develop an incompletive aspectual form. However, all the raw material for its development was present in Classic Ch'olan. Barring further historical research, for instance into why three of the Ch'olan languages and Yucatekan would have developed very similar approaches to split ergativity (cf. Kaufman and Norman 1984:90; Kaufman 1989:Ch.3.2.a, pp. 43-46), anything stated further here remains at the level of unproved hypothesis. Keeping that securely in mind and lacking any other well-evidenced impetus for such a development, one might speculate that if morphological aspectual or tense distinctions did not exist at the time the Spanish Friars arrived, it would have presented an important problem to overcome.

Considering what was available in Classic Ch'olan, a quick solution would have been to express the equivalent of the Spanish present tense with a possessed gerund. After all, as noticed by the clerics, these languages could create sentences without the use of verbs. They could employ nouns and adjectives along with adverbs in verbless sentences to express the equivalent of sentences in the present or preterite in Spanish. A nominalized verb, a gerund, could likewise be used in such sentences. These sentences would be understood by both native speakers and Spanish priests and would fulfill the requirements of translation. Adding an adverb meaning “now” in one case and another meaning “then, in the past” would simply provide distinctions already available in verbless sentences headed by a possessed gerund. The simplicity of that step is of immense importance when providing a convincing hypotheses as to how all of the

Ch'olan languages, except Ch'orti', would have come at such a late date to develop similar progressive and incompletive-aspect morphemes.

No doubt, the influence of the Spanish grammarians through their translations and their students, both native Spanish and Mayan speakers, would have also had a great effect upon the development and reinforcing of such forms. Delving more deeply into the historical evidence of how, with the exception of Ch'orti', similar incompletive forms took hold throughout the Ch'olan and Yucatekan speaking areas will have to be postponed. The same is true of reviewing some of the extralinguistic events that help strengthen the linguistic hypothesis that is being presented here. But at this time, attention will be paid to how Ch'orti' might have come to develop its own way to form the incompletive aspect and its own brand of split ergativity.

9.2.5 Progressive and Incompletive Aspect in Ch'orti'

Both progressive and incompletive aspect formation in Ch'orti' share some characteristics with those of the other Ch'olan languages. As in the rest of the family, its incompletive form is closely related to that of a progressive and likely developed from it into an incompletive. As do all the other Ch'olan languages, Ch'orti' treats intransitive verbs in the incompletive differently from intransitive verbs in the completive aspect. In other words, it too manifests split ergativity. Just as Tumbalá Ch'ol and Ch'olti', Ch'orti' recruits an adverbial reflex of the Classic Ch'olan adverb *wal/iwal*, specifically *war*, to form the progressive and incompletive aspect for both transitive and intransitive verbs. Just as Ch'ol and Ch'orti's closest relative, Ch'olti', Ch'orti' does not morphologically mark root transitive verbs with a suffix for the incompletive.

9.2.5.1 Fundamental Difference in Progressive and Incompletive Aspect Formation in Ch'orti'

Although, at first glance, the similarities between the progressive and incompletive aspect forms in Ch'orti' and the other Ch'olan languages appear to be

extensive, the import of the differences easily outweighs them. As already shown in Figure 313 in Section 8.1.5.8, Ch'orti', unlike the other Ch'olan languages, does not have different forms for the incomplete of either derived transitive or root and derived intransitive verbs. Having explicitly identified all those incomplete forms in the other languages as recruited from nominalized verbs, that is, gerunds, the statement can be broadened to note that Ch'orti' does not use gerunds to construct its incomplete aspect forms at all. But if Ch'orti' does not employ nominals, how can it still manifest split ergativity. Stated in another way, if it does not use nominals, how could the forms have been originally possessed by ergative pronouns in the incomplete, which is how split ergativity developed in the other Ch'olan languages. In short, Ch'orti' takes a completely different path and the forms were not originally possessed forms at all. Instead, Ch'orti' innovated a new set of dependent pronouns to be used only on intransitive verbs in the incomplete. This new set of pronouns is shown in Figure 316 along with the other Ch'orti' pronominal sets.

Given the explanation already offered earlier that the Ch'orti' incomplete forms were not the result of leveling but rather reflexes of the Classic Ch'olan verbal system, which also did not inflect for incomplete or completive aspect, how can one explain the internal linguistic motivation for the development of a specific set of dependent pronouns that are used only for intransitive incomplete verbs?

Ch'orti'	Ergative (Set A) Dependent Pronouns		Absolutive (Set B) Dependent Pronouns	Intrans. Incomp. (Set C) Dep. Pron.
	PreCon.	PreVoc.		
1sg	<i>ni-</i>	<i>(ni)w-</i>	<i>-on</i>	<i>in-</i>
2sg	<i>a-</i>	<i>aw-</i>	<i>-et</i>	<i>i-</i>
3sg	<i>u-</i>	<i>uy-</i>	<i>-Ø</i>	<i>a-</i>
1pl	<i>ka-</i>	<i>kaw-</i>	<i>-on</i>	<i>ka-</i>
2pl	<i>-i</i>	<i>iw-</i>	<i>-ox</i>	<i>-ix</i>
3pl	<i>u-...-ob'</i>	<i>uy-...-ob'</i>	<i>-ob'</i>	<i>a-...-ob'</i>

Figure 316. Ch'orti' dependent person markers

Presenting an explanation for this type of development is especially important because it is not common among languages. In addressing the nature of split ergative systems in general, Dixon (1994:227) notes that:

There is thus pragmatic and semantic pressure for a grammar to treat S and A in the same way (an accusative system) and also for it to treat S and O in the same way (an ergative system), or to combine these possibilities. It is surely in view of these pressures that there are so few tripartite systems, where all of S, A, and O are treated differently.

Several points should be noted here. Most ergative splits in languages, despite the term “split” used to refer to them, do not imply that the systems themselves are temporary or unstable. Dixon (1994:225) describes various types of splits, among them is a

split according to tense, aspect or mood. The matter of control is generally looked upon as most relevant for action in progress, or predicted for the future, or ordered to be done (this yields an accusative profile) and less relevant for actions which are completed, in the past (an ergative scheme).

In all of the Ch’olan languages there is evidence of a split based upon actions in progress, that is, based upon progressive and incomplete aspect. Of a split ergative system resting upon this and other bases, Dixon (1994:225, emphasis added) states, “**All of these splits provide stable grammatical systems.**” If Dixon is correct, then what could possibly have been the basis for Ch’orti’s switch from a stable split ergative verbal system if it indeed had already adopted the one known from Ch’olti’ and the other Ch’olan languages. That one was already of the type that allowed S and A to be treated the same in a situation that emphasized action, animism, and dynamism, that is, in the progressive and incomplete aspect. If indeed one proposes that Ch’orti’s system must

have developed from Ch'olti's, what would it have been about Ch'olti's system that would have clearly forecast or promoted such a development? This question is important because the supposed change is usually attributed to "leveling" within Ch'orti' which seems to imply the loss of the *-el* marker from the incomplete.

9.2.5.2 Leveling Theory Inadequate to Explain Lack of Nominal Incompletives

One suggestion made by Kaufman and Norman (1984:98) is that there might be signs of "levelling the incomplete/completive distinction for derived transitives in favor of the completive form by analogy with the other classes of transitives" because a few of them do not carry the *-n* in Morán's grammar and "The description on page 15 of the *Arte* does not call for suffixation of *-n*. . . ." The idea then is that this analogy might have spread to intransitives in Ch'olti' as they expressly state: "There is evidence that the levelling of completive and incomplete in favor of the completive was already being extended to intransitives as well." They suggest, then, that this may be reflected in "the case of *avixien* 'I go' (*Arte* p. 21) [(Morán 1935a:21)] which is completive in form but incomplete in meaning." This suggestion is picked up again by Robertson (1998:6-7) who also notes that the form seems completive but the Spanish commentator says it becomes a present with the *a*- prefixed. Robertson then terms it a second incomplete and uses it to provide the impetus for the development of Set C in Ch'orti'.

There are several problems here. First, this paragraph of the *Arte* was not written by Morán but clearly later by someone who actually refers back to Morán and what he had said. Second, whoever wrote it seems to be floundering. He says that this *a* can also be prefixed to verbal nouns to form present participles. "Y con esta *a* anteponiendole se hacen participios de presente, poniendole a los nombres verbales" (Morán 1935a:21). "And by prefixing this *a*, present participles are formed, affixing it to verbal nouns."

This is clearly an error since what he is referring to unknowingly in this particular case is the agentive *aj*- as his example shows: *ch'ohbia* "amor" "love" *ach'obia* "el que ama" "He who loves." If there were still any doubt, he also offers this explanation:

“denota la persona que hace la cosa que significa el nombre;” “denotes the person who does the thing signified by the noun.” This grammarian is committing the actual error he says Friar Morán had warned against and had cautioned others saying it was safer to add the *-h-* (*-j-*). But he had already made the mistake by equating this agentive *aj*, often pronounced simply /a/, directly with this temporal proclitic *a-* and clearly does not realize it. This writer can hardly be trusted to understand the fine points of this temporal proclitic and, for that reason, should not be unquestioningly trusted when he writes that it turns a “preterite” into a “present” or that it creates a “future of necessity” out of an incomplete. Although there may be an element of truth in what he writes, this *a-* surely does not turn a preterite into a present or incomplete; nor does it turn a present or incomplete into a future.³⁷⁶

I have already commented on this proclitic *a-* as it occurs in Acalan and Modern Chontal above in Section 6.3.3. It moves the incomplete or future **back closer** to the present. It also moves the complete or past **forward closer** to the present in Chontal (cf. Keller and Luciano G. 1997:450-51 and Knowles 1984:229-232). For example, incomplete *acā k’uxe’* means “estoy por comerlo” “I am just eating it.” Knowles also offers “just begun” as an approximation, so colloquially in English “I have just begun eating it.”³⁷⁷ When used with the complete, as in *acā k’uxi*, the meaning is “acabo de comerlo” “I just ate it.” So it has the sense of “just now finished.” The effect seems to be quite the same here in Ch’olti’. This *a-* neither derives present (incomplete) forms from preterites (completives) nor future forms from the present (incomplete) forms. Instead, the effect in Ch’olti’ appears to be the same as it is in Chontal, thereby moving the action closer to the present whether forward or backward.³⁷⁸

³⁷⁶It should be noted here that a similar assessment of the *a-* proclitic is also mentioned in another passage in Morán’s *Arte* (1935a:12): “estos tres verbos ultimos son preteritos pasibos, que se hacen presentes anteponiendoles aquella *a* al preterito” “These latter three verbs are passive preterites, from which the present is formed by prefixing this *a* to the preterites.” However, this author, whether or not it be Morán himself, has also not grasped the fine points of this proclitic’s connotations.

³⁷⁷Note that the present perfect is the colloquial way to say this in English. The present perfect is **not in evidence** as such here in Chontal.

³⁷⁸Some have, or once had, instead interpreted this *a-* prefix as a 3rd person singular Set C pronoun in Ch’olti’ (cf. Fought 1984:49; MacLeod 1987:27-29; and Bricker 1987:23). That this proclitic is most

(continued...)

If the lack of the *-n* on some examples of the incomplete of derived transitives really were indicating the beginning of leveling even on intransitive incompletives in Ch'olti', as Kaufman and Norman suggest, why would the same constructions be attested in Chontal as well with no suggestion of leveling taking place? The suggestion that this is an example of leveling is clearly based upon misanalysis and lack of understanding by the Friar's followers. This form with the *a-* prefix but no *-n* suffix is by no means an incomplete. Unfortunately, interpreting it as such provides a convenient opening for finding some hint of a leveling process, which they see as the most likely way to bridge the gap from Ch'olti''s to Ch'orti''s handling of the ergative split.

This same corroborating evidence from Chontal also contradicts Robertson's classification of *avixien* as a "second incomplete" or "general incomplete" form based upon the attachment of the adverbial temporal proclitic *a-* to a completive form. If one takes into account the explicit lack of understanding demonstrated by the Spanish writer in this case, the comparative data seem much more trustworthy. In short, *avixien* is a completive form with a temporal proclitic that moves the time closer to the present and that is why there is no *(n)-el* suffix. It indicates a completion time in the very immediate past, perhaps, "I just went," and **not** an action that is still ongoing, "I am going."

³⁷⁸(...continued)
 emphatically not a pronoun will be addressed again later.

	Ch'olti' First Incomplete	Ch'orti' Incomplete	Ch'olti' Second Incomplete
3(PL)	u...el (ob)	a...(ob)	a...(ob)
2SG	a...el	i-	a...et
2PL	i...el	ix-	a...ex

Figure 3. A description of the shift from Ch'olti' to Ch'orti'.

With the two Ch'olti'an INCOMPLETIVES identified, it is now possible to show graphically how these two paradigms collapsed, yielding the single so-called third paradigm we find in Ch'orti', as shown in Figure 3.

These data indicate that in third person, the old *a- ...iob*'), the GENERAL INCOMPLETIVE was formally mistaken for the THIRD PERSON pronoun. Since the INCOMPLETIVE and the ERGATIVE 2SG have the identical form, *a-*, the reanalysis of the INCOMPLETIVE *a-* to 3SG would have resulted in an unacceptable homonymy, with both 3SG and 2SG having the same form, *a-*. This potential homonymy brought about a domino effect. That is, the old ERGATIVE 2PL would move to replace the old ERGATIVE 2SG *a-*. This would again have resulted in another unacceptable homonymy, in that ERGATIVE 2SG and 2PL would have both been *-i*. Apparently this prompted the final «domino»: ERGATIVE 2PL *i-* remained, but was disambiguated by the addition of the *x* of the ABSOLUTE 2PL *-ex*, yielding a new form for 3PL, *ix-*. Thus *u-* > *a-*, *a-* > *i-*, and *i-* > *ix-*, in a succession of changes.

(Adapted from Robertson 1998:8)

Figure 317. Theory of Set C development in Ch'orti' offered by Robertson (1998)

9.2.5.3 Two Theories on How Third Pronoun Set Developed in Ch'orti'

Even if there had been leveling in Ch'orti', it seems there would have been little or no motivation for the development of a new set of pronouns. Robertson (1998:8) suggests that since this form was still an intransitive completive but without *iwal* and with no *-el*, the *a-* proclitic then needed only to be mistaken by Ch'orti' speakers for a 3rd person ergative pronoun. In other words, as he explains in Figure 317, the primary motivation for the development was a misunderstanding by the Ch'olti' speakers of what this *a-* proclitic represented. Because the 2nd person pronoun was also *a-*, and they would have thought that this *a-* temporal proclitic was instead the pronominal proclitic or prefix,

there was a “domino” effect bringing about the changes shown in Robertson’s chart shown here in Figure 317. The final effect would have been the collapse of the two incompletives into one, creating the Ch’orti’ system. However, even if one accepted the “general incomplete” interpretation, mistaking a temporal adverbial proclitic for an ergative pronominal prefix by native speakers seems highly unlikely. Even if one believed that there was indeed a second incomplete, or as the Morán follower called it, a “futuro en ruz” “a future of necessity,” it seems unlikely that a whole population of native speakers would make the same mistake as the Spanish grammarian who basically admitted he really did not understand this morpheme and then committed the mistake against which Morán explicitly warned. What is more, they would hardly have mistaken

... Set C developed diachronically out of Set A, as in the following scenario. The change was triggered by the (preverbal) auxiliary *war*, whose vowel caused homophony in the 3rd person singular pronoun (step 1 below). It is to be expected that it is the most frequently used form that changes first. The change caused subsequent changes to avoid homophony (step 2 and 3). The different members of the paradigm developed as sketched below (only logically sequential steps are numbered):

SG			
1	<i>war ni</i>	→	<i>war in</i> - (metathesis, its behavior may be paralleled by that of the verbal suffix <i>-se</i> , this needs to be checked)
2 (Step 2)	<i>war a</i>	→	<i>war i</i> - (analogy with 2 pl, motivated by avoidance of homophony with the 3 sg which has changed prior to this change)
3 (Step 1)	<i>war u</i>	→	<i>war a</i> - (vowel harmony)
PL			
1	<i>war ka</i>	→	- no change
2 (Step 3)	<i>war i</i>	→	<i>war ix</i> - (/x/ added to avoid homophony with 2 sg)
3	same as Step 1		

(Adapted from Wichmann 1999:21-22)

Figure 318. Theory of Set C development in Ch’orti’ offered by Wichmann (1999)

a temporal proclitic for an ergative pronoun as Robertson suggests they did.

Evidently, also accepting the leveling hypothesis but not the motivation offered by Robertson, Wichmann offers a different version of Set C’s development. It is, however,

also based upon the presence of *war* and its effect upon the 3rd singular pronoun. The first step would then have been the development of vowel harmony based upon the *a*-root of *war*. The outline of his view and the steps required are shown in Figure 318. It is preferable to Robertson's reconstruction especially since it does not require an interpretive mistake. However, it too requires a mini domino-effect and a separate unconnected effect for the first person singular. I do agree with Wichmann that his proposal has the advantage of starting with a phonological trigger. However, such a beginning also seems somewhat fortuitous. It seems that the ergative pronoun, as a prefix, would be more closely connected phonologically to the word to which it was attached than to a separate adverb or auxiliary. Another problem is that Step 3 does not provide an explanation for the source of the *-x* on the 2nd person plural. On that particular score, I think Robertson's proposal, taking it from the absolutive suffix, is closer to the mark. Finally, if the change was indeed set in motion by harmony based upon the root vowel of *war*, why did the ergative set for transitives not change as well. After all, it too would theoretically have been under the same influence from the root vowel of *war*.

Both of these proposals look mainly to Set A, the ergative pronoun set, as the source for the new Set C. I will offer a quite different version next that does not begin with Set A. Even more important, the source will be tied in with the actual origin of the split-ergative pattern that Ch'orti' adopts.

9.2.5.4 Alternative Theory on Development of Set C and Against Leveling in Ch'orti'

So far, I have suggested that evidence of leveling the Ch'olti' intransitive incompletive forms to arrive at those in Ch'orti' is inadequate. I have also suggested that both of the proposals presented, and just reviewed, to explain the development of the Set C pronouns seem insufficiently motivated and too complex. In the last section when discussing the incompletive suffixes attested in all the Ch'olan languages, I noted that the one attested in Ch'orti' best matched that of Classic Ch'olan, namely no suffixes at all.

So if the Ch'orti' split-ergative system did not develop out of that attested in Ch'olti', which was based upon nominals, where did it originate and what motivated it?

I believe there is some evidence to indicate that the best precursor to the Ch'orti' split-ergative verbal system lies in Classic Ch'olan itself. Just as the system developed by the other three Ch'olan languages found its components in Classic Ch'olan, so did that of Ch'orti'. However, since it is so different, it was likely located in a different part of the ancestral system. Is there a grammatical pattern attested in Classic Ch'olan that could serve as well to express split ergativity based upon aspect as do possessed nominals in verbless sentences for the other Ch'olan languages?

There is a Classic Ch'olan grammatical pattern that could be analyzed both for a measure of formal similarity and for elements that resemble those actually used in the much later creation of the Ch'orti' split-ergative verbal system. It often uses a set of independent pronouns that may have served as the etymological source for the Ch'orti' Set C dependent pronouns.

Figure 319 contains a passage from the well-known K1398 polychrome ceramic vessel sometimes called the “Regal Rabbit Vase.” This passage illustrates one of the most dramatic narrative tools the Classic-Period scribes used to direct the reader’s total attention to an event that is reported in a certain part of a text. It stands out as the center of attention and

leaves no doubt as to what the author finds to be important. The construction itself is called a “focus antipassive.” It was identified as such on this vase by Alfonso Lacadena in 1997 (cf. Lacadena 2000:173). The relevant text here can be transcribed as *Hiin*

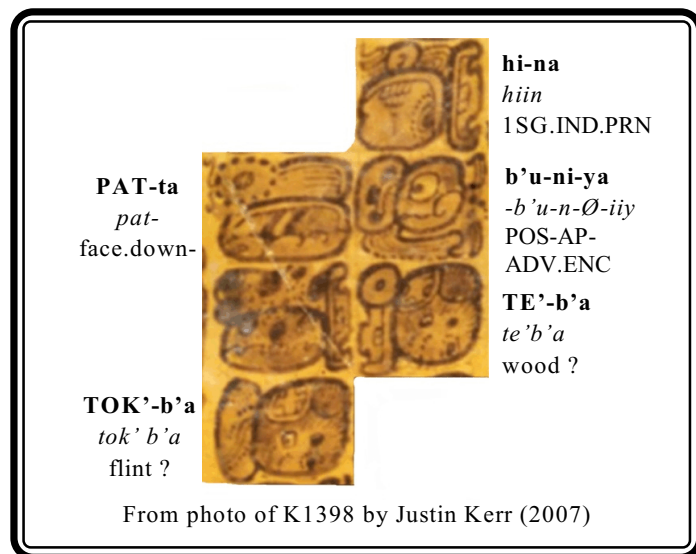


Figure 319. Focus antipassive form on K1398

patb'uniiy b'ahlam tz'am "I overturned the jaguar throne." There are several meanings for the root *pat*, but one attested in Colonial and Modern Tzotzil, "to lie face down," is chosen here as the most appropriate. Support for this interpretation also comes from the next statement: *te' b'a(j) tok' b'a(j)* "[There were] wood strikes [and] stone strikes."³⁷⁹ This is a kenning for "battle" that occurs several times in the Dresden Codex Venus Pages and in the Paris Codex *K'atun* Pages.

From the positional verb *pat*, a transitive verb is formed by adding a *-b'u* causative for "to turn face down" or, more colloquially, "overturn." The *-n* suffix transforms it into an antipassive which emphasizes the subject, here "I," at the expense of the object, "throne." The **ya** glyph at the end produces *-iiy*, the temporal adverbial enclitic well known from previous discussion. This focus construction, usually classified as an antipassive, is formed by pulling out the otherwise required transitive *ni-* dependent pronoun subject from the verbal compound. Then the independent pronoun *hiin* is placed out in front of the verb,

normally an unusual position for pronouns in the case of intransitive verbs. It places the emphasis squarely on the intransitive subject (S).

The identification of **hi-na** *hiin* as the first person singular

independent pronoun was

Classic Ch'olan Independent Pronouns			
1 st sg.	<i>hiin</i>	I, me	[< * <i>ha'in</i>]
2 nd sg.	<i>hat</i>	you	[< * <i>ha'at</i>]
3 rd sg.	<i>haa', ha'i(?)</i>	he/she/it, him/her/it	
1 st pl.	<i>ha'on</i>	we, us	
2 nd pl.	[* <i>ha'ex?</i>]	you plural	[not attested!]
3 rd pl.	<i>ha'ob'</i>	they, them	

Figure 320. Classic Ch'olan independent pronouns

³⁷⁹Kerry Hull (2003:442) has interpreted this instead as *te' b'a(h) tok' b'a(h)* and translated it as "Wood images, flint images". This may be correct, especially if one assumes that the distinction between /h/ and /j/ is indeed followed here and in the Dresden Codex where it also occurs. In the past I have been relying upon the Site Q example **TE' b'a-ja TOK'[b'a-ja]**. But if that instance is instead **TE' B'AH-ja TOK' [B'AH-ja]** and represents *te' b'aahaj tok' b'aahaj* instead, using the *-aj* absolutive form suggested by Houston et al. (2001a:46), and corroborated by **b'a-ji-ja** on the Tamarindito HS 3 Step III:E1, Hull's translation is more likely to be correct. In any case, the *b'aa(h)* or *b'a(j)* is to be paired individually with both *te'* and *tok'* whether it is actually written once or twice.

first made by Michael Carrasco and Kerry Hull (pers. com. 2003.).³⁸⁰ The forms of the independent pronouns that have been attested are quite similar to combinations with *ha'* which is the third person singular independent pronoun in Tzotzil and Tzeltal..³⁸¹ Figure 320 shows the independent pronouns as they occur in the Classic Ch'olan texts. All except the 2nd person plural form are actually attested.

What is important for the present purposes are the characteristics that these focus antipassive constructions exhibit. The verbs in them are derived intransitives. As intransitives, their subjects belong to the S-category just as do subjects of all intransitive verbs. Even though these subjects belong to the S-category rather than the more agency-oriented A-subject category, the construction of the antipassive sentences results in these S-category subjects being highlighted and emphasized discursively not only as much as the A-subjects of transitive verbs but actually even more than them. That extreme emphasis is accomplished by replacing the dependent pronoun with an independent pronoun. Normally the S-subject dependent absolutive pronoun would be attached to the end of the verbal stem. Even if one compares the situation here with a transitive verb from which these antipassives are derived, the A-subject dependent ergative pronoun would be prefixed to the verb, but it would not occupy a separate position completely out in front of the verbal stem itself. Finally, it is precisely the application of a completely different set of pronouns and their initial position that helps to create this emphasis on the subject as agent despite the role it plays in an intransitive construction. According to the hypothesis being formulated here, some features of this set of characteristics are then carried over into the treatment of intransitive incompletives in Ch'orti'.

³⁸⁰This interpretation of *hiin* was first presented in public in a presentation by Michael Carrasco and me at the Texas Maya Meetings Forum on March 12, 2004 (Wald and Carrasco 2004). I applied Carrasco and Hull's suggestion to *Machaj t'u'l? ajaw ? tahiin nimam* on the same vase to translate *tahiin* as "with me" resulting in the Sun God's captioned words being translated as "The rabbit lord is not with me, my grandfather." Since the previous interpretation of *hiin* as "with him" would have produced the strange situation of the Sun God referring to himself in the 3rd person, it served to corroborate Carrasco and Hull's proposal.

³⁸¹Mark Zender (pers. com. 2005) has suggested that the 3rd singular form **ha'-i** is meant to be transcribed as *haa'* with the final **i** vowel signifying that the vowel *aa* is long. What is problematic about this is that in some of the other forms, such as *ha'ob'*, the spelling **ha'-o-b'o** seems to not be concerned about indicating the vowel length. However, in the latter case, the /a/ may be shortened by the suffixing of *-ob'*.

As with the other Ch'olan languages, the immediate impulse to develop morphological aspect may have come from outside of that language family, indeed, as further speculated here, from outside of the whole Mayan language family. Thus one can find neither the fundamental structures of grammaticalized incomplete-completive aspect nor the actual incomplete-completive aspectual morphology itself in Classic Ch'olan. But there are many of the building blocks later recruited for grammaticalized incomplete-completive aspect and other later verbal forms already present in the lexemes, grammatical forms, and discourse structures passed down to all the Ch'olan languages from Classic Ch'olan. Examples of these can be found in the Classic Ch'olan texts. So although there is no split-ergativity based upon incomplete aspect – indeed no incomplete aspect morphology at all – to be found in the inscriptions, there are several patterns that exhibit aspects of the characteristics typologically attested for splits based upon incomplete-completive aspect. These could have been recruited from the bases of just such splits in the Ch'olan languages. If the hypotheses being offered here are correct, the other Ch'olan languages chose a feature that created an accusative pattern for sentences containing intransitive verbs based upon verbless sentences headed by possessed nominals. Only Ch'orti' chose to recruit structures possibly based upon focus antipassives to promote the subjects of an intransitive verbs by fronting their pronominal subjects.

Independent Pronouns					
	Acalan Chontal	Modern Chontal	Ch'ol	Ch'olti'	Ch'orti'
1sg	<i>natz'on</i>	<i>no'on</i>	<i>jonon</i>	<i>natzen</i>	<i>ne'n</i>
2sg	??	<i>ane</i>	<i>jatet</i>	<i>natzet</i>	<i>ne't</i>
3sg	<i>hain</i>	<i>une</i>	<i>jini</i>	<i>ne</i>	<i>ja'x</i>
1pl in 1pl ex	??	<i>no'onla</i> <i>no'on tocob'</i>	<i>jononlaj</i> <i>jononlojon</i>	<i>natzon</i>	<i>no'n</i>
2pl	??	<i>anela</i>	<i>jatetlaj</i>	<i>natzox</i>	<i>no'x</i>
3pl	<i>hainob'</i>	<i>unejob'</i>	<i>jinob'</i>	<i>natzob'</i>	<i>ja'xob'</i>

Figure 322. Independent pronouns in Colonial and Modern Ch'olan languages

Ergative (Set A) Dependent Pronouns								
	Acalan & Modern Chontal		Ch'ol		Ch'olti'		Ch'orti'	
	Pre-Con	Pre-Voc	Pre-Con	Pre-Voc	Pre-Con	Pre-Voc	Pre-Con	Pre-Voc
1sg	<i>kä-</i>	<i>k-</i>	<i>k-/j-</i>	<i>k-</i>	<i>in-</i>	<i>inw-</i>	<i>ni-</i>	<i>niw-</i>
2sg	<i>a-</i>	<i>aw-</i>	<i>a-</i>	<i>aw-</i>	<i>a-</i>	<i>aw-</i>	<i>a-</i>	<i>aw-</i>
3sg	<i>u-</i>	<i>(u)y</i>	<i>i-</i>	<i>iy-</i>	<i>u-</i>	<i>uy-</i>	<i>u-</i>	<i>uy-</i>
1pl in 1pl ex	<i>kä...la</i> <i>kä...tocob'</i>	<i>k...la</i> <i>kä...tocob'</i>	<i>lak-/laj-</i> <i>lojon k-</i>	<i>lak-</i> <i>lojon k-</i>	<i>ka-</i>	<i>kaw-</i>	<i>ka-</i>	<i>kaw-</i>
2pl	<i>aw...la</i>	<i>aw...la</i>	<i>la'-</i>	<i>la'w-</i>	<i>-i</i>	<i>iw-</i>	<i>-i</i>	<i>iw-</i>
3pl	<i>u-...ob'</i>	<i>(u)y-...ob'</i>	<i>i-...-ob'</i>	<i>iy-...-ob'</i>	<i>u-...-ob'</i>	<i>uy-...-ob'</i>	<i>u-...-ob'</i>	<i>uy-...-ob'</i>

Figure 321. Ergative (Set A) person markers in Colonial and Modern Ch'olan languages

Absolutive (Set B) Dependent Pronouns					Intran. Incomp. (Set C) Dep. Pron.	
	Acalan & Modern Chontal	Ch'ol	Ch'olti'	Ch'orti'	Ch'orti'	
1sg	-on	-on	-on	-on	1sg	in-
2sg	-et	-et	-et	-et	2sg	i-
3sg	-Ø	-Ø	-Ø	-Ø	3sg	a-
1pl in	-onla	-onlaj	-on	-on	1pl	ka-
1pl ex	-on tocob'	-onlojon			2pl	-ix
2pl	-etla	-etlaj	-ox	-ox	3pl	a...-ob'
3pl	-ob'	-ob'	-ob'	-ob'		

Figure 323. Absolutive (Set B) and intransitive incomplete (Set C) person markers in Colonial and Modern Ch'olan languages

In most Mayan languages, the independent pronouns are composed of a prefix or at least a consonant followed by a second part or suffix which is usually of a *VC* shape. In some languages the second part of the 3rd person singular form is unmarked. Figure 322 shows the independent pronouns in the Ch'olan languages.³⁸² Figure 321 shows the ergative (Set A) dependent pronouns. Figure 323 shows the absolutive (Set B) and intransitive incomplete (Set C) dependent pronouns.³⁸³ The composition of the second part of the independent pronouns is usually very similar to that of the absolutive set as can be seen by comparing the Figures. Also, taking a look at the Set C pronouns in Ch'orti', one can see some similarities between it and Ch'orti''s own Set A. However,

³⁸²This independent pronoun table was assembled based upon these references: Acalan Chontal: Smailus (1975:212); Modern Chontal: Keller (1997:439); Ch'ol: Hopkins and Josserand (1987:3); Ch'olti': Morán (1935a:4); Ch'orti': Pérez Martinez (1994:84).

³⁸³These three dependent pronoun tables were assembled based upon these references: Acalan Chontal: Smailus (1975:188-189); Modern Chontal: Keller (1997:439,444-445); Ch'ol: Hopkins and Josserand (1987:2) and Josserand and Hopkins (1987:5); Ch'olti': Morán (1935a:4-5); Ch'orti': Pérez Martinez (1994:45,55).

comparing Ch'orti's Set C with the Classic Ch'olan set of independent pronouns as illustrated in Figure 324 turns up even greater similarity. This comparison becomes even more enticing when one notices that the set of Ch'orti' independent pronouns is quite different from the Classic Ch'olan set and that it, along with Ch'olti' has innovated with some new forms that begin, except for the Ch'orti' 3rd singular, in *nV*- and *natz*' respectively.³⁸⁴

This similarity between the Ch'orti' Set C pronouns and the Classic Ch'olan independent pronouns is not likely just fortuitous. Instead, I think it is directly related to the same source that Ch'orti' adapted for its newly minted intransitive incompletive, the focus antipassive construction, which featured the independent pronouns as well. This scenario is justifiable without any resort to the Ch'olti' speaking community's mistaking the *a*-temporal proclitic for an absolutive pronoun. It also does not link the development of Set C pronouns to an interaction between the ergative pronouns and the auxiliary or adverb *war*. Instead, unlike the other Ch'olan languages, Ch'orti's Set C preserves a natural connection to intransitive constructions since it does not build upon the set of ergative dependent pronouns. The independent pronouns are formally more closely related to the absolutive pronouns used for intransitive subjects (S). But as independent pronouns, they can serve in certain contexts as subjects of intransitive verbs thereby promoting them as agents. Finally, it also strengthens the formal connection between incompletive intransitive aspect and split ergativity in Ch'orti', on the one hand, and the focus antipassive constructions and independent pronouns attested in Classic Ch'olan, on the other.

³⁸⁴It is interesting to note that *natz'on* "I" is also attested in Acalan Chontal (Smailus 1975:157) matching Ch'olti's 1st plural "we." *No'on* "I" is attested in Modern Chontal (Keller and Luciano G. 1997:439), matching Ch'orti's *no'n* 1st plural "we." What makes this so interesting is that none of these are attested in Classic Ch'olan and so they likely developed in these languages after the end of the Classic Period. This is more evidence of a Postclassic link among them either through a parent, Postclassic Proto-Ch'olan, or by borrowing among the Postclassic Ch'olan languages.

	Classic Ch'olan		Colonial Ch'orti'		Modern Ch'orti'		Modern Ch'orti'
	Indep. Pronoun		Set C Pronouns		Set C Pronouns		Set A Erg. Prn.
1sg	<i>hiin</i>	→	<i>*in-</i>	→	<i>in-</i>		<i>ni-</i>
2sg	<i>ha'at</i>	→	<i>*at-</i>		<i>i-</i>	←	<i>a-</i>
3sg	<i>ha'</i>	→	<i>*a-</i>	→	<i>a-</i>		<i>u-</i>
1pl	<i>ha'on</i>	→	<i>*on</i>		<i>ka-</i>	←	<i>ka-</i>
2pl	<i>*ha'ex</i>	→	<i>*ex-</i>	→	<i>-ix</i>	←	<i>-i</i>
3pl	<i>ha'ob'</i>	→	<i>*a...-ob'</i>	→	<i>a-...-ob'</i>		<i>u-...-ob'</i>

Figure 324. Chart illustrating proposal tracing development of Ch'orti' Set C from Classic Ch'olan independent pronoun set.

If one takes the Classic-Ch'olan independent pronoun set and compares it to the Ch'orti' Set C as illustrated in Figure 324, several connections become apparent. The explanation for each pronoun will be listed individually to make it easier to follow:

1) 3rd sg. *a-* < *ha'*. The *haa'* (by then surely *ha'*) of the **3rd sg.** independent pronoun is a direct match with the 3rd sg. of Set C, *a-*, provided one allows the /h/ to elide or be dropped as is the case for the whole set when used in this context. Glottal /h/ often elides in morphemes even during the Classic Period. It is very important to note in this regard that in the case of most of the S-V-O languages, including, among others, members of the Yukatekan, Ch'olan, and Tzeltalan language families, their Set B dependent pronouns are almost identical to the second part of their independent pronouns. Comparing Figure 320 and Figure 323 above illustrates this for the Ch'olan family. Because the 3rd sg. Set B pronoun is unmarked, the 3rd sg. independent pronoun either consists only of the first part of the others or of a different root altogether.

2) 3rd pl. *a-* . . -*ob* < *ha'ob*. The 3rd pl. independent pronoun *ha'ob* could also immediately play its role, requiring only an identical /h/ elision and the separation of the plural suffix from the root and its placement at the end of the verb stem.

3) 1st sg. *in-* < *hin*. Turning to the 1st sg. independent pronoun *hiin*, by that time surely *hin*, it also needed only its /h/ to elide and could then serve directly as the 1st sg. Set C pronoun.

So all three of these pronouns in 1) through 3) could serve directly in the role of Set C, with only the elision of an initial /h/.

4) 2nd pl. *ix-* < **ha'ex*. Although the 2nd pl. independent pronoun has not yet been found or identified in the Classic texts, it is very likely that its shape was **ha'ex*. Of the twenty-three languages which Bricker (1977:5) includes in her list of independent pronouns, seventeen include a 2nd pl. in *-ex*, *-ix*, or *-ox*. Closer to home, Ch'olti' has *-ex* and Ch'orti' itself has *-ox*. Looking at the 2nd pl. Set B pronouns, nineteen of the twenty-six listed by Bricker (1977:2-4) have *-ex*, *-ix*, or *-ox* attested as all or part of their shape. From this data, one can suggest that the Ch'orti' Set C form *-ix* also derived from the original, as yet unattested, independent pronoun **ha'ex*. The /e/ of *-ex* might have become /i/ either before or after it began being used in incomplete intransitive contexts, perhaps under the influence of the ergative 2nd pl. in *i-*.³⁸⁵ This change by analogy with the ergative 2nd pl. in *i-* would have occurred after the Set C 2nd pl. had received the value *-ex* from the independent pronoun.

³⁸⁵ It will be interesting to see if the independent pronoun in Classic Ch'olan really is **ha'ex*. Until then, this explanation will have to suffice.

5) 2nd sg. *i-* < 2nd pl. *ix-* (Set C). The original 2nd sg. *-at* from the independent pronoun *ha'at* would have likely changed to *-i* by analogy along with the 2nd pl. in *-ix*, perhaps at the same time that its original *-ex* changed to *-ix*. In addition, the *-x* of the 2nd sg. was dropped to differentiate from the 2nd pl. Among the twenty-three languages listed by Bricker, there are no /i/ vowels attested in the 2nd sg. in any languages for the independent pronouns and only one, an *-it* in Wastek, for the Set B pronoun.

6) 1st pl. *ka-* < 1st pl. *ka'* (Set A). Finally there is really only one solution for the 1st pl. in *ka-*. It had to have come from the 1st pl. of the ergative set. However, it would likely have first been *on-* and then over time have been replaced by analogy with the 1st pl. of Set A which occurred regularly on transitive verbs.

This reconstruction of how Set C was formed and developed is preferable for several reasons. With one exception, there is no necessity to switch among 1st, 2nd and 3rd person singular and plural. Only in the case of the 2nd sg. is it necessary to argue from analogy with the 2nd pl. of the same set and then to drop the final consonant. The three /h/ elisions represent a minimal alteration from the Classic Ch'olan independent pronoun set. The change from /e/ to /i/ in the 2nd pl. is also minimal and the *-i* is common enough in other languages for the 2nd pl. absolutive for Kaufman and Norman (1984:91) to have reconstructed both ***ix* and ***ex* for Proto-Mayan. Alternatively, the change to /i/ might have been influenced by the /i/ of the 2nd pl. of Set A for both Ch'olti' and Ch'orti' and which is reconstructed by Kaufman and Norman (1984:91) for Proto-Ch'olan. Otherwise, one form was clearly borrowed from Set A, the 1st pl. pronoun, and it was taken from its exact counterpart in that set.

A very important advantage of this reconstruction consists in allowing for a possible intermediate stage during which both the *at* of the 2nd sg. and the *on* of the 1st pl. could have easily served as Set C pronouns. The *ex* of the 2nd pl. could have also served well during that time. This would have provided time for the 1st and 2nd pl. of the ergative

Set A, *ka-* and *i-* respectively, to influence the original 1st and 2nd pl. of Set C because of their new frontal position and the increased connotations of agency, animism, and dynamism that came from their use in progressive and incomplete constructions. Then, at the same time or later, the /i/ of the 2nd pl. *ix-* would have influenced, by analogy, the original *at-* of the 2nd sg. to be replaced by *i-*.

There are some other advantages that I see in this reconstruction. One does not need to assume a domino effect. Although there are language changes that may operate in that fashion, I do not see clear signs that multiple domino effects are at work here. Only one seems to be required, that of changing the 2nd sg. from *at-* to *-i* by analogy. Another major advantage is that it requires no assumption that mistakes in the interpretation of a morpheme's category were involved. Another important advantage is that the morphemes recruited for Set C had been used for the same general purpose before the set's development, that is, to stress the agency or dynamism of the intransitive subject. Finally, the alternative offered here does not require so many different types of processes including, among others, metathesis, vowel harmony, and homophony; all selectively applied to arrive at the desired results. In other words, the whole process to arrive at the attested results is much simpler.

There is a further difficulty that the other two theories on the origin of Set C share. They both assume a situation in which *war* seems to have exclusive dominion over its placement immediately preceding the verb in contexts in which it is used. Although it may be possible that its dominion was more exclusive in that position early on, evidence from Modern Ch'orti' clearly does not demand that and neither of the theories supplies arguments for why that had to have been the case earlier.

a. Intransitive Progressive:		
<i>war axuxb'a</i>	“está silbando”	“He is whistling”
b. Intransitive Incompletive:		
<i>war ani inxana</i>	“yo estaba caminando”	“I was walking”
c. Intransitive Affirmative:		
<i>k'ani inwe'</i>	“quiero comer”	“I want to/will bathe”
d. Intransitive Future:		
<i>inxin inxana</i>	“caminaré”	“I am going to walk”
Pérez Martinez (1994:55-56)		
e. Transitive Progressive		
<i>War una'ta tuk 'a war uche.</i> He was thinking about what to do.		
(Adapted from Hull 2005:213-214)		

Figure 325. Examples of different constructions using Set C pronouns in Ch'orti'

Figure 325a-d shows other constructions in which intransitive verbs take the Set C pronoun which were not taken into account in their theories. They only account for contexts such as the one in Figure 325a. Although it is true that Morán does not include examples that employ *ani* as in Figure 325b, examples with both *k'an-* and *b'ix-* that match the Ch'orti' reflexes in Figure 325c and 325d are already present in Colonial Ch'olti'. That increases the likelihood that they would have also been used in Colonial Ch'orti'. The question then might be, why would they not have had an effect upon the dependent pronoun used with them?

Finally, Figure 325e is an example of the progressive construction with *war* and transitive verbs. Since *war* was used in constructions involving transitive verbs in precisely the same contexts, why would the pronouns used with transitive verbs not be affected in exactly the same way if the “change was triggered by the (preverbal) auxiliary *war*, whose vowel caused homophony in the 3rd person singular pronoun” (Wichmann 1999:21). For this reason, it seems that something else had to create the need first, and the phonetic influence on the individual changes would have played a secondary or

supporting role. However, a similar problem is inherent in the other theory that finds the impetus in a mistaken interpretation of the temporal proclitic *a-* (cf. Robertson 1998). This temporal proclitic occurs on both intransitive and transitive verbs in the same type of context. Therefore, any suggested misinterpretation by the Ch'olti' speaking community of this temporal proclitic for a dependent pronoun should have occurred for both transitive and intransitive verbs. Yet an explanation of why it only affected intransitive verbs was not forthcoming.

In my proposal, I have argued that there is no evidence that the recruitment of a nominalized form of intransitive verbs for use in progressive and incomplete constructions ever happened in Ch'orti' as it did in Ch'olti'. The requirement arose in both languages, but probably at different times. The development of the verbal aspect distinction between incomplete and complete did come along with a proclivity to treat the subjects of intransitive verbs just as the subjects of transitive verbs when in the incomplete aspect. The pattern of focus antipassives as attested in Classic Ch'olan already contained a pattern promoting intransitive subjects by fronting independent pronouns to serve as the subject of antipassive verbs. Set C was formed in Ch'orti' by using a shortened version of these pronouns to serve in that capacity. Over time, the Set A pronouns had a moderate effect on three of these Set C pronouns, probably grounded in their use on transitive verbs in similar contexts.

Because the independent pronoun set matches the Set B dependent pronoun set so closely, one might also argue quite convincingly, based on form alone, that Set C might have been patterned on Set B instead. However, a better approach would be to argue that the original independent pronouns were patterned upon the Set B pronouns and that it was the independent pronouns that were then conscripted for Set C use. There are several reasons for choosing this option. First, the Classic Ch'olan independent pronouns are still slightly closer to Set C than are the dependent pronouns of Classic Ch'olan Set B, insofar as they are attested. The independent-pronoun-source hypothesis also provides a reason for the shape of the Set C 1st sg. *in-* and the 3rd sg. and pl. *a-* and *a-...ob'* that cannot be provided by Set B *-Ø* and *-ob'*. Second, the independent-pronoun-source hypothesis

provides additional motivation for fronting the Set C pronouns that clearly cannot come from Set B since its members follow the verb. Third, an important context in which independent pronouns are often used already entails reference to an intransitive subject (S) by placing it in front of a derived intransitive verb. Fourth, although less important, the independent-pronoun-source hypothesis is simpler than either of the other two and leaves less to pure chance.

At the risk of making this hypothesis seem more complicated than it really is, I have provided in depth details of how Set C likely developed. One of the main reasons for providing this much detail is because of the further ramifications that come from accepting it. If this scenario is right, then it is extremely likely, if not inescapable, that Ch'olti' and Ch'orti' had a separate history at least from the time of the Spanish invasion forward. If so, Ch'orti' would have never experienced the creation of split ergativity or even incompletive aspect based upon gerunds as is sometimes assumed. It is hard to understand what would have otherwise been the motivation for a hypothetical Colonial Ch'orti' to have given up a system of split ergativity based originally upon possessed nominals that already provided the needed animacy brought on by the use of progressive and incompletive aspect. That system had become operable early on in Colonial times and worked well in all the other Ch'olan languages and even in Yukatekan. Instead, being somewhat removed from the community of all those other speakers and less influenced early on by the Spanish priests, Ch'orti' speakers paved their own way in accommodating the linguistic influences that eventually came even to them.

9.2.5.5 A Separate History for Ch'olti' and Ch'orti'

Not accepting this separate history for Ch'orti' is among the reasons why linguists have adopted a morphological leveling theory for Ch'olti's southern sister although there are other reasons as well. Some arguments against such leveling have already been provided in the previous section. It is being addressed again here because some have proposed that there are traces of a Set C in Ch'olti' (cf. Fought 1984:49-50; MacLeod 1987:27-29). I have already argued in detail in Section 9.2.5.2 above that the supposed

incompletive *a-* form that Morán says makes a “present” (incompletive) out of a “preterite” (completive) and a “futuro en ruz” (“future of necessity”) out of the “present” (incompletive) is instead a temporal proclitic that, in effect, moves both the incompletive and the completive closer to the present moment. In English, the meaning of this proclitic is perhaps best captured by the effect of using the word “just” for the completive as in “He/She just ate it” and “just starting” or “just begun” for the incompletive as in “She/He is just starting to eat it.” It occurs with the same meaning and effect in Acalan and Modern Chontal.

Fought (1984:49) notes that the explanations of the supposed Set C pronoun in Morán’s *Arte* do miss the mark. But he also suggests that there are examples of this “pronoun” in the doctrinal texts. However, the examples that I have found again simply corroborate the explanation I have already offered. One of the passages that has been directly quoted to support the interpretation of this *a-* as the 3rd sg. Set C in Ch’olti’ is from the *Confessario en Lengua Cholti* written in 1685 (cf. MacLeod 1987:28). It is as

<i>a-</i>	<i>k'ex-</i>	<i>pa(j)</i>	<i>ne</i>	<i>pa(n)</i>	<i>ti</i>	<i>chohb'-</i>	<i>ya(j)</i>	<i>b'ak'-</i>	<i>tal</i>
ADV	change	MPS	DEM	bread	PRP	cherish	PRT	flesh	INP
just	changed		that	bread	into	cherished		flesh	
Did that bread just get changed into [the] cherished flesh [of]									
<i>kaw-</i>	<i>ajaw-</i>	<i>il</i>	<i>jesu</i>	<i>kristo</i>					
1PE	lord	PSN	[Latin]	[Latin]					
our	Lord		Jesus	Christ					
our Lord Jesus Christ?									
<i>a-</i>	<i>k'ex-</i>	<i>pa(j)</i>	<i>ne</i>	<i>vino</i>	<i>tu</i>	<i>cho(h)b'-</i>	<i>ya(j)</i>	<i>ch'ich'-</i>	<i>el</i>
ADV	change	MPS	DEM	wine	PRP + 3SE	cherish	PRT	blood	INP
just	changed		that	wine	into his	cherished		blood	
Did the wine just get changed into his cherished blood?									

Figure 326. Analysis and translation of passage containing Ch’olti’ *a-* temporal proclitic

follows: *Aquexpa ne pa ti chohuia bactal cau ahauil Jesuxrto, aquexpa ne vino tu chobia chichel?* (Morán 1935b:10). Figure 326 shows the same passage along with an accompanying analysis and translation.

It should be noted that the verb, in each case *k'expa*, is in the completive. It is derived as a mediopassive. If it were an incomplete, it would be instead *k'expa(h)el*. Indeed, it is hard to see how prefixing a Set C pronoun to a completive form would help in any way at all to provide evidence for either an incomplete form or split ergativity. Split ergativity occurs only with incomplete or progressive forms and not with completive forms. What is more, the interpretation of this temporal proclitic *a-* provides the meaning that Morán and his followers were explaining without the necessity of inventing a new type of “present.” An additional piece of evidence in this particular passage for the interpretation offered here, is the use of the demonstrative pronoun *ne*. This adds to the immediacy of the passage and the appropriateness of the meaning “just” in this context. It is what would be appropriate for a liturgical or catechismal lesson that followed immediately after the saying of a Mass including a celebration of the Eucharist and the Consecration of the bread and wine.

This use of *ne* here also provides the opportunity to address a closely related morpheme. Its allomorph *e* has been suggested as a Set C 2nd person pronoun in Ch'olti'. In one of the entries in his *Vocabulario*, Morán (1935c:4) lists *haine*, *ne*, and *e* as equivalents of the demonstrative pronoun “aquel,” “that” or “that one.” As also noted by MacLeod, it is used simply as a definite article in Ch'orti' (cf. Pérez Martinez et al. 1996:63) and is also at times used in a similar way in Ch'olti'. However, it is **not used** as a Set C dependent pronoun in Ch'orti'. The problem concerning the possibility of its being a Set C pronoun in Ch'olti' arises solely from this one entry in Morán's (1935c:30) word list: “partícula demostrativa - *e*; esta letra es partícula de posesión para la 2^a persona de singular i para los nombres de oficio i dignidad” “demonstrative particle - *e*; this letter is a possessive particle for the 2nd person singular and for the names of officials and dignitaries.”

Considering the context provided in this vocabulary entry, an explanation can be offered that makes the interpretation of this *e* quite far removed from the conclusion that it is a Set C pronoun in Ch'olti'. First of all, it states directly that it is considered a demonstrative particle. But the dependent pronouns are not demonstratives. Second, the definition pairs two meanings, that of a possessive particle and of a particle that is used in connection with "officials and dignitaries." It seems then that it is used in a special way especially when referring to people that demand respect because of their office or place of honor. This may be quite similar to the use of the Spanish word "vos" in certain contexts. "Estuvo muy en uso en lo antiguo y aún se emplea para dirigir la palabra a Dios y a los santos o personas de gran autoridad" (Sapiens 1975:295). "It was used very often in ancient times and is still used to direct speech to God and to the saints or to persons of high authority." This is similar to the practice in English of addressing dignitaries as "your majesty," "your lordship." It is likely its use in these contexts that produced the "2nd person singular" mention in the definition.

Grammatically, *e* seems here to be closer to a special use of the definite articles in both Spanish ("el, la, lo") and English ("the") when referring with emphasis to someone (or even something) who is well known for a specific status or achievement. The American Heritage Dictionary (2000) notes, "Used to indicate uniqueness: *the Prince of Wales; the moon*." But even more enlightening in this present context is this definition from the same source, "Used as the **equivalent of a possessive adjective** before names of some parts of the body: *grab him by the neck; an infection of the hand*" (bold emphasis added). As already noted above, *e* is used as a definite article in Ch'orti'. This reference then is evidence that it is being used in a similar way already in Colonial Ch'olti'. Among other language changes brought about by the Spanish occupation, it seems that the European style of definite articles was taken up by the Ch'olan language family as it also was in other Mayan languages, for example, *ri* in Kaqchikel. The similarities between definite articles and demonstrative pronouns made these pronouns a natural etymological source.

It seems quite clear that the search for a possible Set C in Ch'olti' has come up empty. If what I have presented in regard to the Ch'olti' and Ch'orti' verb systems' separate development is correct, this is precisely what would be expected. Ch'olti, along with Yukatekan and the other Ch'olan languages except for Ch'orti' had, most likely under the influence of the Spanish Friars, come up with the introduction of aspectual verb morphology by recruiting gerunds ending in *-l*, mainly in *-el* for intransitives and different nominal suffixes for transitives and positionals. At first they retained the character of possessed nominals and indeed were often still used as possessed nominals in certain contexts. The connotations of agency connected with possession, and later the animacy and dynamism connected with incompletive aspect led to a split in the straight ergative system that was a natural outgrowth of the original etymological choices. At this point, Ch'olti' would not have required a further search for a way to accommodate the newly acquired approach to verbs and the formation of tense and aspect within the system. It would have amounted to a search for something it already possessed.

Ch'orti' speakers, however, were probably not in close contact at the time this development took place. Nevertheless, the socioeconomic forces brought on by the Spanish occupation eventually did play a role in creating the conditions for a change in its verbal system as well. However, it developed its own way to arrive at a split in ergativity on recognition of the animacy and dynamism created on the part of subjects of intransitive verbs. That way, as already noted, was through the creation of a third set of dependent pronouns.

This is then another reason to conclude that the Ch'olti' of Morán's *Arte* is not the direct ancestor of Ch'orti'. Ch'orti's Colonial ancestor, Ch'olti', was clearly a close sister but not simply the same language at an earlier time. So Morán's *Arte* is describing Colonial Ch'orti's sister language and not its ancestor. Giving Classic Ch'olan the name "Classic Ch'olti'an" would amount to ignoring the separate recognition Ch'orti' deserves as a direct descendent. For students and aficionados of the Classic-Period texts, it might prevent insights that could come from leaving open the possibility of separate and independent developments and innovations without necessarily having to justify them in

terms of each other's shared diachronic tradition. There is little question that Ch'olti' and Ch'orti' have a common parent, but both of them likely had separate histories following their split. They are doubtless closely related, but as siblings, not as parent and child.

9.2.6 Evidence That Development of Aspect Morphology Is Recent

During the discussion concerning the formation of the incompletive and progressive aspects in the Ch'olan languages both in this and the last section, the evidence allowed several different conclusions to be reached. One of them was that Ch'orti''s verbal system most closely resembles the system of Classic Ch'olan insofar as it does not have any morphological affixes for incompletive aspect. Just as the other Ch'olan languages, it uses several auxiliaries and adverbs to form various aspects and tense/aspect combinations, some of which appear to be grammaticalized. But none of them are prefixed or suffixed to the verb as morphological inflectional affixes. It does use a different set of dependent pronouns for the intransitive incompletive subjects, but this actually resembles what takes place using independent pronouns in the Classic Ch'olan focus antipassive constructions. The use of this set of pronominal prefixes in Ch'orti' does signal the incompletive aspect for intransitive verbs. Ch'orti' as well as the other Ch'olan languages, including Classic Ch'olan, can also have other clitics attached. These are not grammaticalized in Classic Ch'olan and not all of them are grammaticalized even in the Modern languages, although some are and others may be on their way, depending upon one's interpretation. At any rate, these constructions are not what make up the basic incompletive-completive aspectual distinction in Ch'orti'.

	root tv	derived tv	iv
plain	{ $\frac{**\text{-o-V}_1}{**\text{-o-h}}$ or }	{ $\frac{**\text{-V}_1}{**\text{-h}}$ or }	** -i (k)
dependent	** -a-?	** -Vh	** -oq
imperative	{ $\frac{**\text{-a}}{**\text{-ah}}$ or }	** -Vh	** -een
perfect	** -o-?m	** -?m	** -i-naq

Table 9. Proto-Mayan status markers.

Adapted from Kaufman and Norman (1984:92)

Figure 327. Proto-Mayan status markers reconstructed by Kaufman and Norman

9.2.6.1 Review of a Proto-Ch'olan Reconstruction

Kaufman and Norman in their 1984 article on Proto-Ch'olan provide an outline of Proto-Mayan status markers, reproduced here in Figure 327. Because their main purpose is to reconstruct Proto-Ch'olan and not Proto-Mayan, it includes only a bare outline showing their view of the basic divisions in the system and the status markers that were associated with them. Other than the status markers for these main categories, they do not reconstruct in this article possible Proto-Mayan morphological affixes or other morphological structures that might have been used at a lower level directly for the incomplete-completive distinction. However, Kaufman and Norman (1984:92-83) state that

plain status corresponded to verbs in the indicative mood in either completive or incomplete aspect, dependent status corresponded to verbs in dependent clauses or otherwise subordinated to some higher verb, while imperative and perfect status had the functions that their names imply.

Kaufman and Norman (1984:93) also note that in Proto-Greater Tzeltalan, most of the characteristics of the Proto-Mayan system were retained.³⁸⁶ The completive and incomplete aspect within this plain status, however, is for them not directly relevant to the incomplete and completive status in Proto-Ch'olan.

	root tv	derived tv	iv <u>a</u>
incomplete	{ *-v *-e ^a and/or	*-(v)n <u>b</u>	*-el
completive	{ *-v *-i and/or	*-∅	*-i
imperative	*-v ₁	*-(v)n <u>b</u>	*-en

Table 11. Proto-Cholan status markers. ^a Other patterns of intransitive verb inflection existed in proto-Cholan but are not reconstructible at present. ^b The parenthesized vowel indicates that in a stem ending in -a, the addition of this suffix causes the -a to be replaced by -a.

Adapted from Kaufman and Norman (1984:93)

Figure 328. Proto-Ch'olan status markers reconstructed by Kaufman and Norman

As indicated in Figure 328 (their Table 11), Kaufman and Norman (1984:93) argue that instead of inflection, “the Ch'olan languages have restructured the original

³⁸⁶They also state that the “perfect,” my “resultative,” has been lost as an inflectional form leaving only the perfect participles *-b'il and *-em (cf. Kaufman and Norman 1984:93). The function of the resultative (their perfect) in Tzeltalan and especially in Colonial Tzotzil has been discussed in detail above in Sections 4 and 5. While there are such participles in the Tzeltalan and Ch'olan Languages, I have followed Smith, Robinson, and Haviland in their description of both transitive and intransitive resultative (Haviland's “stative” or “STAT”) inflection in the Tzeltalan languages and very similar inflection for active transitive and intransitive verbs in Classic Ch'olan. Although Greater Tzeltalan innovated by reinterpreting the Proto-Mayan transitive resultative in -o'm as an intransitive resultative instead and created a new transitive resultative in -Vj (which Kaufman has noted elsewhere), the resultative (“perfect”) as a category was still alive and well. However, I have not found -b'il being used as passive resultative (“perfect”) inflection in Classic Ch'olan although passives, mediopassives, and antipassives can all be inflected by the intransitive resultative suffix in -o'm instead. This situation seems problematic at first because -b'il does indeed serve to form a perfect passive participle in the Tzeltalan and Ch'olan languages. However, evidence especially from Colonial Tzotzil points toward the existence of stative participles which are close in shape but different in function and diachronic development from resultative inflection itself. This is true, not only of -b'il but also of -oj/-ej and -om/-em. Although they are similar in shape, they are not the same morphemes and take part in separate diachronic developments especially in Tzotzil. They also do not function or behave in the same way. When they occur as active verbs, no auxiliaries are required. They also do not allow any further derivational or inflectional suffixation. The gerund or participial forms do.

system by introducing a distinction between completive status and incompletive status.” However, they note that instead of this distinction occurring within the plain status, it takes the place of both the original Proto-Mayan and Greater Tzeltalan plain and dependent status distinction. The markers no longer distinguish plain (indicative) status from dependent (subordinate) status but rather incompletive from completive aspect. The Proto-Ch’olan status markers shown in Figure 328 reflect Kaufman and Norman’s views at the time the article was written in 1984 and their views of Proto-Ch’olan might have changed since that time. However, it can serve as a starting point.

9.2.6.2 Revisions Based Upon Reevaluation of Ch’olan Languages

Leaving aside the reconstruction of the imperative, this discussion will now be concentrated only upon what has been reconstructed for the incompletive and completive status markers in Proto-Ch’olan. Although Kaufman and Norman undertook their reconstruction with the express purpose of not taking Classic Ch’olan into account, the approach here will be quite different. There will be no attempt to exclude the data from Classic Ch’olan, but rather to actively take it into account. The reconstruction will therefore try to account for elements of Kaufman and Norman’s reconstruction while also accounting for the actual role that some of those elements played in the language attested in Classic Ch’olan. Much of the data from the Colonial and Modern Ch’olan languages that was used in the reconstruction of the Proto-Ch’olan status markers shown in Figure 328 has already been presented and discussed in detail in other contexts up to this point. As a consequence, some of the reasons for including or excluding certain morphemes as innovations will only be summarized or mentioned without any further detail here.

Turning first to the root transitives, the alternative possibility of an **-e*’ status marker should be removed based mainly upon weakness of the argument for including it. Kaufman and Norman hold the possibility of **-e*’ open because of a reconstructed Proto-Mayan **-a*’ dependent status marker and because it would result in a historical distinction between incompletive and completive status markers for root transitives. Neither of those arguments are convincing and the argument for the necessity of an incompletive-

completive distinction across the board reveals an underlying conclusion in favor of the antiquity of that distinction in the Mayan languages based upon its frequency in the Modern Mayan languages. The evidence from Chontal and especially Ch'ol for a status marker in *-e'* for root transitives in the incomplete seems too weak for consideration as Proto-Ch'olan. Ch'ol, of course, has more evidence to the contrary. Incompletives almost always attest a bare root minus even the root transitive status marker. The examples of an *-e* or *-e'* incomplete suffix in Ch'ol are limited to three in the sources mentioned by Kaufman and Norman, that is, Attinasi (1973:220) and Warkentin and Scott (1965:121). Also, it is possible that these examples may have originated because of influence from Chontal which regularly used the *-e'* status marker in positive contexts (see Figure 313 above). The Chontal evidence for *e'* is stronger, but there is also counterevidence concerning its antiquity that comes from its absence in negative contexts, as already explained. The Chontal negative incomplete evidence for *-V_I* makes it quite likely that the time depth for *-V_I* is greater. The evidence from this negative incomplete form in Chontal is not mentioned in Kaufman and Norman's discussion.

The argument concerning the reconstruction of the completive status marker is similar. Ch'olti' and Ch'ol both attest simply *-V_I*. The alternative in *-i* is based upon its presence in Ch'orti' and Chontal, but those two suffixes are clearly not related. Ch'orti' has innovated and its suffixes for root transitives in both the incomplete and completive are thematic (see Wichmann 1999:22ff.) and can be considered a later development along the lines of the complete reinterpretation of its approach to verbal suffixes. The Chontal *-i* is probably a completive suffix based upon its appearance on almost all verb forms, both transitive and intransitive. As such it is likely recruited from the *-iij* enclitic that is also attested in Acalan Chontal. It too must be recent in that particular usage. As a grammaticalized form, it retains just one part of the original meaning of the enclitic that served as its source. Although the *-V_I* suffix only occurs in the negative incomplete in Chontal, its presence there also points toward its antiquity in the completive as well. That

it serves as a root transitive status marker in Ch'ol and Ch'olti' strengthens this hypothesis.

That then would leave the root transitive with only the $-V_l$ suffix for both the incomplete and complete status markers. Since it is the same in both incomplete and complete, it cannot be correctly called either an incomplete or a complete status marker. Instead, Proto-Ch'olan is left with only the $-V_l$ as the status marker for root transitives. A reconstruction by Kaufman (cf. Justeson and Campbell 1997:65) of a Proto-Mayan $*-o(w)$ status marker for root transitive “plain status,” corroborates the likelihood that this reconstruction is correct for Proto-Ch'olan as well. The presence of a $-w$ on this status marker is confirmed by the form that is attested in Classic Ch'olan despite its absence in the Colonial and Modern Ch'olan languages. What this also means is that, at least as far as the root transitives are concerned, Ch'olan has not innovated at all but simply carried over a reflex of the plain status marker for root transitives with no indication that it has innovated an incomplete/complete distinction for it..

Turning next to derived transitives, we have already indicated at various times throughout this study that the $-(V)n$ proposed by Kaufman and Norman for the incomplete of derived transitives, as shown in the reconstruction in Figure 328, is recruited from a gerund form. Since this incomplete suffix for derived transitives is simply recruited from a gerund and is not used as an incomplete in Classic Ch'olan, there is also no need to reconstruct it as an incomplete in Proto-Ch'olan, but simply as a nominalizer. As supporting evidence against the need for incomplete forms for derived transitives, one might also note that causatives in $-s$ and $-es$ do not add an $-n$ suffix in either Ch'orti' or Ch'olti'. Thus, especially in light of the Classic Ch'olan and Ch'orti' evidence, one could reconstruct the absence of incomplete status markers for derived transitives as well.

The suffix in $-el$ has long been recognized as a nominalizer forming gerunds from intransitive verbs. That was also explicitly stated by Kaufman and Norman when reconstructing their incomplete status marker for intransitives. There is then a solid reason to reconstruct these as gerunds or participles at some point in time. Indeed the

reflexes of this suffix are still used in the Ch'olan languages to derive gerunds and participles including in Ch'orti' which does not use them at all to form incomplete intransitives. The use of these gerunds in incomplete contexts is likely an innovation that takes place later than their use as nominals, especially if one takes Classic Ch'olan into account. Classic Ch'olan attests the use of *-el* as a suffix deriving gerunds but not its use as incomplete inflection.

Figure 328 indicates that an **-i* has been reconstructed for the complete of root intransitives. But as argued in detail above in Section 3.3.1, *-i* is more likely historically to have been a status marker for root intransitives and not complete inflection. Both Ch'ol and, albeit to a very limited degree, Ch'olti still attest it as a root intransitive status marker. It became identified as an indicator of complete inflection only after the *-el* nominalized form was recruited as incomplete inflection. What is more, it only serves in complete contexts when accompanied by an additional tense or aspect auxiliary or by a particle derived from an adverb. Indeed, this particular *-i* suffix in Ch'ol and Classic Ch'olan can be traced back all the way to Proto-Mayan **-ik* where it is reconstructed as a status marker for root intransitives and not as a complete suffix. Chontal does indeed attest an *-i* in the complete for almost all verbs and so, as already noted, that particular suffix can surely not be identified as simply an intransitive status marker of any kind. The *-i* suffixes that occur in Ch'orti' on both transitive and intransitive verbs are neither complete inflection nor root intransitive markers, but simply thematic suffixes. They are not related to the *-i* marker of root intransitives.

As Figure 329 shows, the forms proposed for differentiating incomplete from complete aspect can instead be interpreted in a way quite different from usual if one both takes Classic Ch'olan into account and approaches the daughter languages with that knowledge in mind.

Proto-Ch'olan	
Status Markers	
Root Transitives:	<i>*-V_I(w)</i>
Root Intransitives:	<i>*-i</i>
Nominal Derivation	
From Transitive stems	<i>*-Vn</i>
From Intransitive stems	<i>*-el</i>

Figure 329. Reconstruction of Proto-Ch'olan transitive and intransitive status markers and nominal derivational suffixes

Instead of being led to recreate incomplete and complete inflection, simply identifying these supposed inflectional suffixes for what they were before being recruited as such by some of the Ch'olan languages, provides a more accurate historical picture. All of the ingredients were indeed there for later use, albeit in different ways by each of the daughter languages.

9.2.6.3 Preliminary Conclusions

Although this analysis does not answer the question concerning how the distinction between incomplete and complete came about in the Ch'olan languages, it does have major advantages. It explains how it is that the Classic Period script, otherwise clearly written in a Ch'olan language and the likely ancestor of all the current Ch'olan languages, would not make the distinction between incomplete and complete either. It also explains how it is that Ch'orti' would be able to avoid making the distinction between the incomplete and complete transitives using gerunds although its sister language Ch'olti' clearly did. It affirms the lack of distinction between the incomplete and complete aspect for root transitives and derived *-es* causatives in both Ch'olti' and Ch'orti' by demonstrating that its absence was the norm among verbs whereas the recruitment of incomplete forms was the real innovation. Ch'orti' can no longer be accused of leveling in this regard, but rather can be recognized for preserving what was already present in Classic Ch'olan. It also explains the source of the lack of the incomplete forms in negative contexts in Chontal. It is not a result of leveling either but rather a preservation of older forms which is typical for negative contexts. Although these conclusions could not have been reached by comparative linguists without resorting to the written language of Classic Ch'olan, the footprints and clues were, and in some cases still are, present in the daughter languages if one only seeks them out. In doing so, it is best to proceed based, not upon assumptions, but upon clues and evidence provided in the actually-attested parent language. It can now be seen as a source for further progress in uncovering the etymological bases of incomplete and complete verbal inflection and in providing a more accurate time frame for dating their origin.

What Classic Ch'olan provides are the ingredients for the attested forms of the incomplete-completive distinctions that are found in the Colonial and Modern Ch'olan languages. The evidence from Ch'orti' provides a minority report showing that a system without suffixes for incomplete and completive aspect can and does function among the Ch'olan languages. It accomplishes a distinction for incomplete verbs based upon pronouns but does not require it for transitive verbs. It does treat intransitive verbs differently from Classic Ch'olan by promoting the animacy of the subject of intransitive verbs. In doing so, it makes use of a rare way to both distinguish incomplete from completive aspect and to promote the animacy of intransitive subjects in an ergative system, namely by creating a new set of pronouns.

In the end, this analysis also implies that the lack of distinction between incomplete and completive aspect that Kaufman and Norman indicate for the level of their Proto-Mayan reconstruction shown in Figure 327 above, also obtains for Classic Ch'olan and Proto-Ch'olan. It also recognizes status markers that are reflexes of those arrived at for root transitive and intransitive verbs in Proto-Mayan plain status. This is not, of course, what they reconstructed for Proto-Ch'olan, but the evidence indicates that one likely should reconstruct it in that way, even if one places Proto-Ch'olan temporally right after the Late Classic Period. Otherwise, the pattern attested for Ch'orti' would not fit. This situation in Classic Ch'olan and Proto-Ch'olan, however, also represents a Trojan horse for the explanation previously provided concerning where the incomplete and completive aspect resides for Proto-Mayan. Kaufman and Norman (1984:92) indicated that such distinctions took place at a different level, that is, within the plain status division. However, Classic Ch'olan with its intransitive and transitive status markers does not have nor does it need those distinctions between incomplete and completive and surely not any between a highly unlikely present and past tense. Since it does quite well without them, as a daughter language of Greater Tzeltalan and ultimately a great granddaughter of Proto-Mayan, is it not eminently reasonable to question the reconstruction of any incomplete and completive aspect distinction for Proto-Mayan as well?

9.2.7 Creation of Tense and Aspect Morphemes: Two Case Studies

9.2.7.1 Searching for the Known Among the Strange

The analysis just completed has examined incomplete and complete aspect forms quite removed from their usual contexts. Some more-practical linguists such as Keller and Luciano G. (1997:449-450) refer to the forms directly involved in that basic distinction as “the general tenses” (“Los tiempos generales”) versus “the specific tenses” (“Los tiempos específicos”) which use those forms but are also made up of other components. These components are usually derived from verbs and adverbs. The discussion above has already furnished evidence to support the hypothesis that the actual forms used for the aspectual distinctions existed already in Classic Ch’olan. However, there is no secure evidence that they had either the same function or meaning until much later, possibly under the influence from Spanish after the turn of the 16th century. Is it possible that the various verbs, adverbs, and adverbial clitics that are used in construction of some of the “specific” tenses and aspect combinations did not exist as grammaticalized tense or aspect morphemes before the 16th century?

As mentioned earlier, the first “verb” that Morán (1935a:7) investigates in his *Arte* is the Ch’olti’ equivalent of the Latin verb “sum, es, fui,” that is, the verb “to be.” He recognizes that this verb does not actually exist as such. Nevertheless, he can point out how the past and future tenses are formed. That Morán finds these basic tenses in verbless sentences should already put one on notice that caution is required. He continues by noting that “pretérito” and “futuro” are formed by adding specific particles. The preterite (a past tense) and the future are formed by adding the particles *oni* and *ek’al* respectively. From this use of the term “particle” (“partícula”) it is abundantly clear that Morán does not use that term in the narrow sense of a grammaticalized form. Few would attempt to argue that *oni* “long ago, formerly” is really a grammaticalized morpheme representing a marker for the preterite in Ch’olti’. Probably no one would attempt to argue that *ek’al* “tomorrow” is really a grammaticalized morpheme representing the future tense in Ch’olti’, especially not when it appears in a verbless sentence. This should be a signal that when the term “particle” is used in Morán’s *Arte*, it does not refer

specifically to tense or aspect markers but rather to adverbs and other lexemes and compounds as well. One has to use other methods to determine their grammatical status.

There is neither time or space here to do a thorough or even adequate analysis of the various forms that appear with verbs or in verbless sentences in the Ch'olan languages. Instead, only a few examples will be mentioned to provide a hint of some of the problems that arise in that regard. Is there sufficient evidence that these forms are grammaticalized in the languages being examined? Is there evidence that these forms have a long history of being used in the particular grammatical contexts in which they appear? Is there enough evidence to reconstruct them not only as independent morphemes or lexemes but actually as grammaticalized tense or aspect forms? Does there seem to be enough evidence to decide whether it is the lexeme or the grammaticalized morpheme that is shared by the family. If either lexemes or grammaticalized morphemes are shared, are they also attested in Classic Ch'olan and if not, why not? How does or should that affect the conclusions reached as to the historical depth of the forms as grams rather than ungrammaticalized lexemes?

9.2.7.2 Future and Modal Future Constructions among Ch'olan Languages

9.2.7.2.1 Constructions with *-ik*

The oldest known Ch'olan language text written by a native is the Acalan Chontal document. Starting with it, the only future I have been able to securely identify is a modal future or subjunctive in *-ik* which appears throughout the document. Two examples of it are shown in Figure 330a and b. This is significant for several reasons. The

Acalan Chontal: Future/Optative:		
a)	<i>utz ti bixic</i>	(Paxbolon et al. 1614:169:5)
	"bueno a él ha de ir"	
	"sería bueno que fueran allá" (Smailus 1975:108)	
	"it would be good to go there"	
b)	<i>chançabiliceti</i>	(Paxbolon et al. 1614:161:18)
	"tu debes de ser matado"	
	"serás asesinado"	(Smailus 1975:59)
	"you ought to be killed"	

Figure 330. Modal future (optative, subjunctive) in Acalan Chontal

first is that this modal future or optative form is a reflex of one that occurs in the Classic texts.

Several very good examples of this form occur on the West Panel of the Temple of the Inscriptions. One of them is shown in Figure 331. Since one of the passages also contains *naik* it has been recognized as a likely optative form for some time. However, Barbara MacLeod (1998 Texas Maya Meetings Symposium), deciphered the verb that accompanies it as *tim* a reflex of the Yukatek verb *tem*. Bolles

(2001:3327) lists *tem* in various forms as “satisfacer” (“please, satisfy”) and *tem ol* as “aplacar, satisfacer” (“placate, please”). The meaning of *ich* here, however, is still uncertain.³⁸⁷ Still, keeping that lack in mind, *ichik utim a(w)ohl* in the illustrated passage could be translated as “May it please you.” More literally, “May it be pleasing to your heart.” So while the adverb *naik*, does appear earlier in a passage with this same idiom, the shorter form *-ik* seems to serve the same purpose.

Second, this modal future form is also still attested in Modern Chontal. Examples of it are shown in Figure 332a-c. Its function and meaning seems to be much the same as in Acalan Chontal. However, this type of modal future, or at least this *-ik* suffix, is not available for

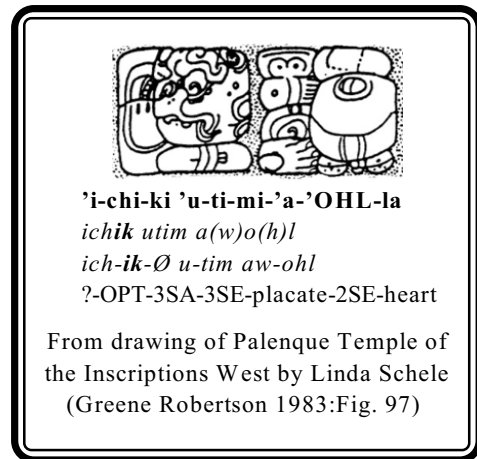


Figure 331. Modal future (optative, subjunctive) in Classic Ch’olan

Chontal: Modal Future/Optative	
a) <i>bixik</i>	“He/she might go”
b) <i>ko kāmāne’</i>	“I want to buy it”
c) <i>talik kande kāmāne’</i>	“If I buy it.”
[lit. “If arrived/happened my buying it.”]	
Knowles (1984:126-128)	

Figure 332. Modal future (optative, subjunctive) in Modern Chontal

³⁸⁷One possibility might be *ich’* which is widely attested in Tzotzil and Tzeltal (e.g. Laughlin 1988:143; Slocum et al. 1999:454) with a general meaning of “accept, take.” However, I have not been able to find any evidence of it in any of the Ch’olan sources. What is more, this word ends in /ch’/ and not /ch/ as attested in the Classic Ch’olan passages mentioned. There are very few if any cases in which there is crossover between glottalized and unglottalized consonants in the Classic-Period texts.

transitive verbs in Chontal. As Knowles (1984:126) notes, **transitive verbs are not marked** for the optative or subjunctive. In other words, they do not take the *-ik* suffix that is present on all the intransitive verbs in the same contexts. There are two ways that Chontal speakers overcome this problem. One is to use a modal verb or an adverb as shown in Figure 332b. Another is to use one of two verbs that both otherwise have the meaning “arrive, come” but simply equate to an optative meaning in this context. An example of that is shown in Figure 332c. So *talik kande kāmāne* “if I buy it” uses the verb *tal* as a grammaticalized morpheme which has lost its former literal meaning of physically “coming or arriving (somewhere).” What is more, according to Knowles, this form of the verb using the original root “*tal*” does not occur in other contexts where instead, in the form *te*, it retains its meaning as physically coming or arriving.

What is quite striking about the Chontal examples is that the formation of the modal future is very similar to that of Ch’olti’.³⁸⁸ As can be seen in Figure 333a, the intransitive example does carry the suffix *-ik*. However, when the verb is transitive, it does not carry the *-Vk* suffix as is illustrated in Figure 333b-d. The adverb *naik*, however, does appear with transitive verbs.

Ch’olti’: Modal Future/Optative	
Intransitive	
a)	<i>xloquic ixte ne diablo ta puczical</i> (Morán 1935b:3) <i>xlok’ik ixte’ ne diablo ta puksikal</i> “May even the devil go out of your heart”
Transitive	
b)	<i>xatzutu aba tu ut Dios</i> <i>xasutu ab’a tu ut Dios</i> bolberse a Dios (Morán 1935c:11) “May you turn yourself toward the face of God”
c)	<i>xuchobenet</i> <i>xuchohbenet</i> (Morán 1935b:3) “May he love you”
d)	<i>xa loccenonaic</i> (Morán 1935a:24) <i>xalok’senon naik</i> “May you take us out/away”

Figure 333. Modal future (optative, subjunctive) in Ch’olti’

³⁸⁸ Among languages, future time is sometimes based etymologically upon a modal, as is the case in English, “I **will** do it.” That has led some to deny that it is really a future tense even in English. To avoid that controversy here, I have been referring to similar constructions as “modal future.” Whether or not these constructions in a particular case have lost the modal connotations and have become grammaticalized as future tense is not being addressed here. These examples from Ch’olti’ and Chontal also fall into the category of modal futures. In most of the passages from Morán, the optative connotations seem to outweigh those of a simple future. In some others, the future connotation seems stronger than the optative.

As Knowles noted, Chontal was faced with the same possibility of misunderstanding because the *-ik* suffix indicating the modal future did not appear on transitive verbs. For that reason, methods were devised to overcome this problem. It is likely that Ch’olti’ also required a way to overcome the same problem. Therefore, what we may have in the case of the *x-* prefix in Ch’olti’ is a comparable method of overcoming the misunderstandings resulting from a similar situation. If a suitable morpheme could be recruited to mark the optative or modal future on transitive verbs, the likelihood of misunderstandings could be avoided.

In the Ch’olan and Tzeltalan languages there are at least two morphemes that might fill the requirements. They are the adverb *xa* and the adverbial enclitic *-ix*. Although their actual meanings and functions in the different languages varies, their core meanings both usually center around “already” with *xa* also meaning “again” and *-ix* also meaning “then, back then, now. We know from Morán’s grammar that *-ix* is attached to the “passive” (actually mediopassive) participial form *puyul* “burned” to form *puyulix* “ya esta quemado” (“it is already burned”). So it has the meaning known from Ch’orti’ and Ch’ol of “already, in the past, back then.” The enclitic *-ix* does not occur in Morán’s lexicon as a separate entry, perhaps because it is an enclitic.

si alguna cosa	<i>xa tuca // xa tuk’a</i> ‘something?, if something’
si alguno	<i>xa machi // xa machi</i> ‘someone?, if someone’
si es asi	<i>xa col // xa kol</i> ‘if it is thus’ (cf. asi; como)
si no es asi	<i>xa ma col // xa ma? k’o?l</i> ‘if it is not thus’
si tu no...	si tu no me entiendes -- <i>xa ma anata inti, ma ixteina</i> – yo tampoco a ti -- <i>taati</i> // <i>xa ma? a-na?ta in-ti?</i> ‘if you don’t understand me?’; <i>ma?ix te?i na?ta a-ti?</i> ‘I don’t understand you either’
mas	<i>xa // xa</i> ‘more’

Adapted from Stross (1990)

Figure 334. Some uses and meanings of *xa* in Ch’olti’

The other possibility, *xa*, does occur in the lexicon, both on its own and in a listing of several combinations or compounds in which it plays a part. Figure 334 shows some of them. While it is defined as “mas,” perhaps in the sense of “rather,” when standing alone, it means “if” when used in a variety of combinations. This would seem to fit in well with an optative that eventually took on a more general modal future meaning.

There is not enough evidence concerning whether it may have first been used only for the transitive modal future and then spread to intransitives or whether it may have been applied to both at the same time.

The same modal future suffix *-ik* is also reflected in the Ch'ol subjunctive including the future subjunctive shown in Figure 335a and b. Following a pattern that occurs often in Ch'ol, the main verb is preceded by an auxiliary to form the complete verbal construction.

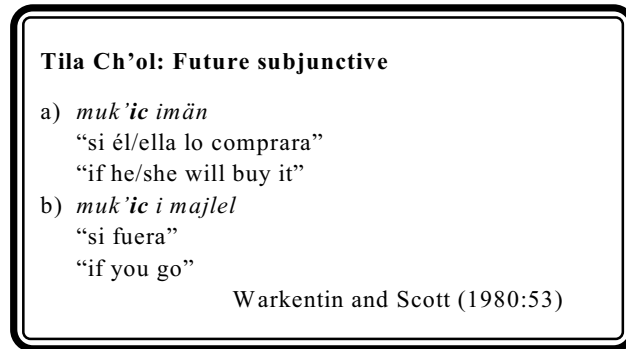


Figure 335. Future subjunctive in Tila Ch'ol

Important to note, however, is that the suffix is attached not to the main verb. Instead it is the auxiliary that receives the suffix.

It is not yet completely clear how to analyze the Classic Ch'olan construction shown in Figure 331. The root *tim* is clearly transitive and it is indeed attested earlier in the Temple of Inscriptions West Panel (at A7) with the root transitive status marker: **'u-ti-mi-wa** *utimi'w*. However, it appears to be a gerund or a possessed uninflected nominal form in the passages in which it is preceded by *ichnaik* or *ichik* as in this case. Attempting to decide why **timik* would not have been used instead without being sure of the meaning of *ich* would not be productive. The *xa* morpheme does precede some verbs in the Classic Period texts, as noted by Stuart et al. (1999a:33). However, it is rare as a prefix and in the few known examples, there is no indication of a future connotation.³⁸⁹ It has not been found as a prefix in any context along with the *-ik* suffixes as in Ch'olti'. It has also not been found playing a part in any of the many passages in which a future connotation is present as in the examples shown in Section 5.2. More likely, it is the same *xa* that has the meaning “again” or “already” in Ch'olti'.

³⁸⁹Note that the syllables **xa** and **xi** are used in writing a mediopassive suffix *-ax* in Classic Ch'olan that has already been discussed earlier. The examples mentioned here are **not related** to that suffix.

Because this *x-* prefix does not occur in any of the other Ch'olan languages along with the *-ik* modal future or even separately to form a modal future, this particular use of the *x-* prefix in this context is most likely a Ch'olti' innovation or at least an Eastern Ch'olan innovation. Since it is not in evidence in Ch'orti' either, Ch'olti' may have innovated this feature after its split from Ch'orti' or, alternatively, Ch'orti' may have lost it after the split between the two languages. Finally, what is most important in this regard for our purposes is to note that the lack of this *x-* prefix in Classic Ch'olan likely rules out any direct morphological relationship between the Tzeltalan incomplete in *x-* or any theoretically reconstructed Common- or Proto-Mayan *x-* incomplete or future unless it was borrowed by Ch'olti' after the end of the Classic Period. It is, however, important to note that all of these affixes may be related on the lexical level, since both *xa* and *-ix* are widely attested in the Mayan languages.

9.2.7.2.2 Constructions with *k'an-* “wish, want”

There are other types of future and modal future constructions evidenced in the Ch'olan languages. Only a few of them will be reviewed here. Expressions based upon concepts such as “desire” or “want” are often grammaticalized in other languages. For example, English “wanna” as in “I wanna eat” may be on its way toward that status.

As shown in Figure 336a, Lubeck (1989), in his practical grammar, includes *k'ani* as a future whose meaning does not seem to be limited to just the narrow concept of “desire” for something, if one judges by the translation he assigns. Pérez Martinez (1994) also includes similar constructions in his Ch'orti' grammar. In Figure 336b, he calls *k'ani inwayan* a future, but his translation “quiero dormir” is less indicative of a real future. Still, Pérez Martinez goes further in Figure 336c, *k'ana ani inwira* which he calls an optative and translates it with a Spanish conditional form. These future constructions

using the verb *k'an-* are also noted by Morán (1935a:13) for Ch'olti'. Under the heading *Infinitivo* and the rubric “El Futuro,” he included a reflex of the same verb in a similar construction as shown in Figure 336d, although it does not seem to represent a grammaticalized morpheme there.

Chontal and Ch'ol attest similar constructions

using lexemes that have the meaning “wish, want.” They do not, however, use the same word root, *k'an-* (or *k'än-*) in those constructions because in those languages its meaning has changed. For example, in Chontal (Keller and Luciano G. 1999:69), it now means “to need, to use” in its various forms such as *c'äñalan*. Similarly in Ch'ol (Aulie and Aulie 1998:23), various forms using the same root mean “to use” or “to serve as.”

Already for Acalan

Chontal, Smailus (1975:220) notes that several verbs with the general meaning of “querer,” “wish, want,” such as *-ol*, *kupan*, and *pakin* can serve in these “future” constructions similar to those of the other Ch'olan languages.

Ch'orti': Future	
a) <i>k'ani inmani</i>	“compraré, voy a comprar, quiero comprar” (Lubeck 1989) “I will buy, I am going to buy, I want to buy”
b) <i>k'ani inwayan</i>	“quiero dormir” (Pérez Martinez 1994:56) “I want to sleep”
Ch'orti': Optative	
c) <i>k'ani ani inwira</i>	“quería ver” (Pérez Martinez 1994:59) “I would like to see him/her/it”
Ch'olti': Future Infinitive	
d) <i>ink'ana xch'ic' en ti chan</i>	“quiero ir al cielo” (Morán 1935a:13) “I want to go to heaven”

Figure 336. Modal future based upon verb meaning “want, desire” in Ch'olti' and Ch'orti'

Acalan Chontal: Modal Future With “want, desire” Verb	
(Subordinate verb intransitive:)	
a) <i>col numicon</i>	“yo quiero pasar” “I want to pass by”
(Subordinate verb transitive:)	
b) <i>yol abi yubin</i>	“él quiere oír” “He wants to hear it” (Smailus 1975:220)
Modern Chontal: Modal Future With “want, desire” Verb	
c) <i>ko kande ba p'ixiket . . .</i>	“I want you to wake up . . .” (Knowles 1984:341)
Ch'ol: Modal Future With “want, desire” Verb	
d) <i>yom i q'uel</i>	“Quiere verlo” “He wants to see it.” (Aulie and Aulie 1998:242)

Figure 337. Modal future based upon verb meaning “want, desire” in Chontal and Ch'ol

Two examples of such usage are shown in Figure 337a and b. These “verb” forms *col* and *vol* could be interpreted as possessed nominals, in which case the literal translations would be “my desire is to pass by” and “his desire, then, is to hear it.” It is also important to note that Acalan Chontal as well as Ch’olti’ and Modern Chontal use the suffix *-ik* here on the second verb when it is intransitive but not when it is transitive. This does not mean that the intransitive verb is in the future and the transitive is in the present, as Smailus suggests, but simply that the *-ik* suffix only occurs on intransitives in these contexts. This similarity, along with others, between Eastern and Western Ch’olan serves to indicate that the split between them was more recent than some would suggest.

In the Modern Chontal example in Figure 337c, the same verb meaning “want” is used, but it has now shortened even further to *ko*. One is left with only the 1st singular ergative and the vowel root of the verb. Even the *l* of the nominalizing suffix has disappeared. In Ch’ol, the verb used in these contexts is irregular as well and also consists of an ergative pronoun and *-om*. An example of this construction is shown in Figure 337d. Even with the stage of grammaticalization represented in this Ch’ol construction, its etymological form is still quite easy to spot. A more literal translation of the example *yom i k’el* makes it clear: “he wants his seeing.” As explained by Aulie and Aulie (1998:241), the second verb is “en infinitivo,” an “infinitive” and it takes the same pronoun as that of the first verb. This is indeed a more grammaticalized version of what can be more easily seen in the Colonial Chontal and Ch’olti’ languages and relies strongly on nominalizations.

9.2.7.2.3 Constructions with Reflexes of *b'ix* “go”

Future constructions in

Chontal using forms of the verb “to go” are shown in Figure 338a, b, and c. They are basically the same except that Figure 338c shows the same word meaning “to go” pronounced slightly differently as *he* instead of *xe* in a different dialect. The other differences have mainly to do with pronunciation and orthography. Examples of

similar constructions in Ch’orti’ and Ch’olti’ using a verb meaning “to go” are shown in Figure 338d and Figure 338e respectively.

There is no evidence of any forms like this in Classic Ch’olan. It is doubtful that any linguists would require these languages to have borrowed these forms from each other. There are several ways that these forms could have developed. One possibility is that the languages in question split after the Classic Ch’olan texts were written. While I think that such a split did occur at about that time, I do not believe that forms such as this future which uses reflexes of *b'ix* “go” are that old. An alternative might be to propose that futures using equivalents of the verb “to go” are common in languages and so could have easily developed independently based solely upon the concept of “going” and its relationship to the concept of “future” as “that toward which one is figuratively going.” Still another possibility is that the influence of a different language might have led all of them toward the formation of a future by using their own lexical equivalents of a verb

Future with the Verb “to go”

Chontal:

- a) *'u xe tä chämó* “él va a morir” “he is going to die”
(Pérez González 1998:28)
- b) *cä xe cä c'uxe'* “lo voy a comer” “I am going to eat it”
(Keller and Luciano G. 1997:450)
- c) *kä he kä tzämsen* “I’m going to kill him.”
(Knowles 1984:342)

Chorti:

- d) *inxin inxana* “caminaré” “I am going to walk”
“(voy a caminar)”
(Pérez Martínez 1994:56)

Ch’olti’:

- e) *xch'ic'en xin c'alén inu otot* “iré a hacer mi casa”
“I’m going to (gonna) build a house”
(Morán 1935a:9)

Figure 338. Future constructions using verb “to go”

meaning “to go.”³⁹⁰ In other words, the structure would have been borrowed while the lexical content remained autochthonous. In this case, the impetus surely could have come from the Spanish speaking friars or priests or from bilinguals themselves using their first languages’ reflexes of the verb “ir” to form future constructions. Such possibilities must be seriously considered in cases such as this before reconstructing non-attested forms in languages such as Classic Ch’olan, which is well represented by thousands of texts.

9.2.7.2.4 Alternative Future Construction in Ch’ol

Ch’ol was not included among the examples in the previous figure because I was not able to locate a future based upon a verb meaning “to go.” First, it no longer attests clear reflexes of the verb *b’ix* “to go.” It does have a different verb with the same meaning, *majl*, but it is not used in a similar way to form a future.

Figure 339a illustrates this verb

used in a special way preceding another verb. However, the future connotations do not come from the verb *majl*. Instead, *majl* is one of a group of verbs that can be used in similar constructions. These include, among others, *tyäl* “come,” *hul* “arrive home,” *k’ot* “arrive elsewhere, and so on (Warkentin and Scott 1980:45). Both of the verbs, in this case *majlel* and *män* “buy,” have the dependent pronoun prefix attached.

The morpheme that indicates the future in Figure 339a is actually *mi kej* (*mi quej*). Ch’ol attests a future formed using the auxiliaries *mi kaj* (*mi caj*) (Tumbalá and Sabanilla dialects) or *mi kej* (*mi quej*) (Tila dialect). Other examples of this Ch’ol future are shown

Ch’ol - Future with *mi kej/mi kaj*

a) *mi quej [imajlel] imän*
“él [irá] a comprarlo” “he will [go] to buy it”
(Adapted from Warkentin and Scott 1980:47)

Tumbala and Sabanilla

b) *mi caj i taj* “lo encontrará” “he/she/it will find it”
c) *mi caj i letsel* “subirá” “he/she/it will go up”
(Aulie and Aulie 1998:244,252)

Tila

d) *mi quej i män* “él lo comprará” “he will buy it”
 “élla lo comprará” “she will buy it”
(Warkentin and Scott 1980:40)

Figure 339. Special future in Ch’ol

³⁹⁰Of course, in this particular case, all of the languages employed a verb with the same etymology. However, as the next section on progressives will show, that did not always happen.

in Figure 339b-d. Both *kaj* and *kej* mean “comenzar” “begin” (cf. Attinasi 1973:277) in their respective dialects. Starting with that meaning, they have likely become grammaticalized to take on the meaning “future.” In other contexts, *mi* can mean “if” (Aulie and Aulie 1998:73). As such, it is used in conditional sentences as well. The etymology of *mi* is not immediately transparent in the Ch’ol sources.³⁹¹ In Classic Ch’olan *mi* has the meaning of “zero” in calendrical contexts. While it may also include the idea of “completion,” the negative connotations seem to be preponderant. In Tzotzil, which along with Tzeltal seems to have had a strong influence on Ch’ol verbal morphology, *mi* also means “if” and is used as an auxiliary although not necessarily in identical contexts. Important here is the evidence of *mi* as a negative that is still attested in Tzotzil in certain contexts. The phrase *mi ja’uc* means “ni siquiera” “not even” (Delgaty and Ruíz Sánchez 1978:83). Since *ja’* alone means “sí” (“yes”), the negative part of the phrase likely comes from *mi*. The compound auxiliary then may have had the literal meaning of “not begun” when originally recruited for use in this context. This Ch’ol future is interesting because, as we shall see, Acalan Chontal uses its own reflex of the same verb, but without *mi* to form a progressive instead.

All these constructions are interesting in themselves, and are especially important for possible connections to the Classic-Period texts. Still, more important to note at this point in the discussion, is the **large variety of verbs and adverbs that have been recruited** for use in verbal constructions in just the portion of future and modal future forms that has been cited. Of all these constructions, including those that are likely grammaticalized, only one is traceable back to Classic Ch’olan in a similar usage. It is significant that this Classic Ch’olan morphological suffix *-ik* does not represent a future tense or an inceptive aspect, but is rather a mood. In the contexts attested so far in Classic Ch’olan, it has an optative connotation and is therefore a modal morpheme expressing a desire or wish. It is possible that further contexts may expand its modal

³⁹¹The morpheme *mi* may or may not be related to *mi’* which is used with verbs to indicate what Aulie and Aulie (1998:74) call “el aspecto de la habitual,” “habitual aspect.” Habituality is a characteristic often expressed by the inceptive aspect in Mayan languages.

meaning, but there is no evidence at all so far that might permit its classification as a tense or an aspect.

As discussed earlier, some (cf. Robertson et al. 2004:270) have asserted that the presence of an *x*- future marker in Ch'olti' provides an indicator of its presence in Classic Ch'olan, although completely unattested there. They also assert that it played a critical role in the change from a Common Mayan incompletive-completive aspectual verb system to a Classic Ch'olan present-past tense system. To accomplish this, they have to assert the contemporary, but unwritten, existence of a grammaticalized morpheme that does not appear at all in any Classic Ch'olan texts. What I contend is that Ch'olti' does participate in the Classic Ch'olan tradition of an *-ik* modal future or optative as a descendant. However, all the evidence indicates that Ch'olti' innovates an *x*- prefix which is not attested as a grammaticalized prefix indicating “future” in any of the other Ch'olan languages **including** Classic Ch'olan. Of course, I do not rule Ch'olti' out as a direct ancestor of Classic Ch'olan based upon that innovation. Nevertheless, the presence of an innovation in Ch'olti' surely cannot provide support for the existence of a morpheme in Classic Ch'olan that was proposed as a requirement for it to switch to a tense system from a reconstructed aspectual system in Common Mayan. All the evidence so far indicates that should one insist that the *x*- future in Ch'olti' is a grammaticalized reflex of a reconstructed grammaticalized incompletive *x*- in Common Mayan, then, expressed facetiously, Classic Ch'olan must be excluded as a direct ancestor of Ch'olti'. Alternatively, one must find the grammaticalized *x*-future or *x*- incompletive morpheme in Classic Ch'olan. Just finding an adverb or enclitic that may have been recruited for a different purpose later will not suffice.

9.2.7.3 Progressive and Progressive-like Constructions Among Ch'olan Languages

All of the Ch'olan languages provide evidence of ways to express an event as happening at the present moment or at the moment of reference. Especially English-speaking grammarians often think first of the progressive aspect because it is the most

straightforward grammaticalized way to express an event ongoing at the present time. This tendency may be at least partially due to connotations of the current English present tense which is used more to refer to habitual events than those currently underway. Only a small set of words expressing emotions or states of mind can be used in the English present tense with the same “current moment” connotation.³⁹² The present tense is not as limited in some other languages such as Spanish or German, which can regularly use it to express much of what requires the progressive aspect in English. From the standpoint of typology, besides expressing an event ongoing at the present time, the progressive, since it represents a combination of tense and aspect, also generally includes the connotations of incompleteness and being continuous (cf. Crystal 1987:428). Although all of the constructions that will be reviewed in this section are given the name “progressive aspect,” this should not be taken as an indication that these constructions have necessarily been grammaticalized. Instead, they should be viewed as constructions that are at least similar in function and meaning to progressive aspect. In some cases, evidence will be provided that they are probably not grammaticalized. Nevertheless, they usually represent what would amount to a translation into that particular language of what would be the progressive aspect or continuous present in English, Spanish, and other languages.

9.2.7.3.1 Progressive or “Ongoing Present” in Acalan Chontal

Two examples of the most common progressive constructions in Acalan Chontal are shown in Figure 340a and b.

It employs forms of the verb *cah* (*kaj*) “to begin” followed by a possessed nominalized verb, which is otherwise classified as the incompleted form. Smailus (1975:220) calls it the “presente

Acalan Chontal: Progressive (“Presente Continuo”)

- | | | |
|----|---------------------------|--|
| a) | <i>cahi utalel</i> | (Paxbolon et al. 1614:166.29) |
| | “él vino” | “It began their coming” (“They began coming”) |
| b) | <i>cahix abi ukatabal</i> | (Paxbolon et al. 1614:156.18) |
| | “él preguntó” | “It began, then, his requesting” (“He began requesting”) |

Figure 340. Progressive aspect in Acalan Chontal

³⁹²These include, for example, verbs that express emotions or states of mind such as love, hate, etc. Thus one normally says “I love you” rather than “I am loving you” to express a currently ongoing state.

continuo” “continuous present.” Whether it is actually a grammaticalized progressive construction at this early date in the history of the Acalan Chontal language is open to question. Figure 340a can be translated into English literally as “It began, their coming” and colloquially as “They began coming.” There is little question, however that it serves the same purpose as do the constructions that rely instead upon a different morpheme in some of the other Ch’olan languages, that is, reflexes of *wal*.

This form using the verb *kaj* to convey a progressive meaning does not appear as such in any of the other Colonial or Modern Ch’olan languages. A reflex of the same verbal root does, however, occur as part of a grammaticalized future form in Ch’ol, as already shown in Figure 339a-d. No examples of this type of progressive construction have been identified in Classic Ch’olan. However, just as the absence of an *x*- future in Classic Ch’olan does not rule out Ch’olti’ as its direct descendant, so too does the absence of this *kaj* progressive in Classic Ch’olan not rule out Acalan Chontal.

9.2.7.3.2 Progressive in Modern Chontal

Modern Chontal forms a progressive, called a “presente actual o en proceso” (“current or in-progress present”) by Keller and Luciano G. (1997:450), which uses *mu’* or *muk’*. Examples are shown in Figure 341a-d. Both forms are likely based upon *muk’* which is a noun meaning “fuerza”

(“power, force”) or an adjective meaning “strong, much, swift” although neither etymology is explicitly verified by either Knowles or Keller and Luciano.³⁹³ According to

Chontal: Progressive: (“Presente Actual o En Proceso”)		
a) <i>mu’ cā c’uxe’</i>	“lo estoy comiendo”	“I am eating”
b) <i>mu’ cā tz’ibān</i>	“lo estoy escribiendo”	“I am writing”
c) <i>mu’ u wāye</i>	“está durmiendo”	“I am sleeping”
(Keller and Luciano G. 1997:450,460)		
d) <i>muk’ ’ut’äbo</i>	“He is climbing”	
(Knowles 1984:228)		
(Alternate progressive:)		
e) <i>’anon kăxenen</i>	“I’m watching him”	
(Knowles 1984:355)		

Figure 341. Progressive aspect in Modern Chontal

³⁹³The use of words referring to “strength” or “force” in forming verb constructions is clearly
(continued...)

Knowles (1984:228), “The progressive proclitic is *muk’* which has an allomorph *mu’* before the Set A first person pronoun and in fast speech.” The forms shown in Figure 341a, b, and c illustrate root transitive, derived transitive, and root intransitive verb stems respectively. Knowles (1984:354-355) also points out another form of the progressive in Chontal employing “one of the most commonly used aspectual intransitive verbs” *an* “to be in a state.” An example of it being used to form a present progressive is shown in Figure 341e.

9.2.7.3.3 Progressive in Ch’olti’

The remaining three Colonial and Modern Ch’olan languages all attest a progressive or immediate present using reflexes of the word *wal*. It takes slightly different forms depending upon the language. We have already noted that an earlier form of its etymological source is still attested as the verb *wa’* “to stand, be in a position” in these languages although they also attest adverbial forms as well usually with the general meaning of “now.” The progressive (“presente”) forms attested in Ch’olti’ have already been discussed earlier.

Ch’olti’: Progressive/Incomplete/Presente

- a) *iwal uwanel kami* (root intransitive)
duerme nuestro Padre’
“Our father is sleeping” (“Now, his sleeping, our father”)
- b) *iwal inpakxiel* (derived intransitive)
“actualmente me buelbo”
“Now I am returning” (“Now, my returning”)
- c) *iwal ink’ana intamsen inwak’ach* (root transitive)
“quiero matar me gallina de la tierra”
“Now I want to kill my hen” (“Now, my wanting, my killing, my hen”)
- d) *ma iwal inwila* (negative, root transitive)
“no lo veo”
“I do not see him now” (“Not now my seeing him”)

Adapted from Morán (1935a:13,20,21; 1935c:47)

Figure 342. Progressive and “presente actual” constructions in Ch’olti’

³⁹³(...continued)

attested in the related language Ch’ol. According to Warkentin and Scott (1980:49), Ch’ol actually uses the noun *wersa* borrowed from Spanish “fuerza” (“force”) to express a request *wersa ma’ män* “!Es necesario que lo compres! “You must buy it!”

Figure 342 illustrates forms that the different types of verbs take in these constructions. The forms in Figure 342a and b show *iwal* being used with intransitive verbs which here take the gerund forms in *-el*, at least from an etymological point of view. Those in Figure 342c and d show the forms taken by transitive verbs, also based upon gerunds. The clause in Figure 342d is at the same time an example of this form with the negative *ma* “no” or “not.” As also noted before, no forms similar to these are attested in the Classic Ch’olan texts.

9.2.7.3.4 Progressive in Ch’orti’

The Ch’orti’ forms in Figure 343a and b, transitive and intransitive respectively, are similar to those of Ch’olti’ although the form of the progressive morpheme is somewhat different. The adverbial morpheme is *war* and, as already explained in detail earlier, the verbs themselves are not inflected

Ch’orti’: Present Progressive (“Presente Progressivo”)		
a) <i>war awira</i>	“le (a) estás viendo” “You are seeing [“looking at”] him/her”	(transitive)
b) <i>war axuxb’a</i>	“está silbando” “He/she is singing”	(intransitive)
Incompletive (“Incompletivo Imperfecto”)		
c) <i>war ani awira</i>	“lo estabas viendo” “You were seeing [“looking at”] her/him/it”	(transitive)
d) <i>war ani inwe’</i>	“yo estaba comiendo” “I was eating”	(intransitive)
Adapted from Pérez Martinez (1994:55, 56, 67)		

Figure 343. Progressive constructions in Ch’orti’

other than with the dependent pronouns, with the intransitive verbs taking the Set C dependent pronouns instead of those of Set A. The examples in Figure 343c and d are the same except for the presence of an additional morpheme *ani*. According to Pérez Martinez (1994:67), this marks them as “incompletive imperfect” (“incompletivo imperfecto”) which corresponds to the Spanish imperfect and roughly to the past progressive aspect in English. *Ani* is listed by Pérez Martinez et al. (1997:12) as an adverbial particle meaning “era” (“was”). From the example given in the dictionary, it

seems to also serve as an incomplete or past-tense copula and, as such, may be based upon the verb *ayan* although this is not stated.³⁹⁴

Considering that Morán has already identified a “presente actual” in Ch’olti, one would think that in a modern sister language 400 years later, the progressive might be well on its way to grammaticalization. There are, however, signs that even in Ch’orti’ the progressive in *war*, at least in traditional contexts such as healing prayers, may still reveal signs of its ungrammaticalized origin. Etymologically, *war* more than likely originated from a positional verb *wa’* with the meaning of “stand, be in an upright position. In its adjectival or participial form it would be *wa’ar*. It has shortened to *war* in its usage in progressive constructions. Thus what is considered a progressive form really found its beginning in a participle meaning “standing,” an etymology not unusual for progressives in other languages as noted by Bybee et al. (1994:127-133).

Kerry Hull (2003) has recently pointed out the use of *war* in a series of couplets with another word occupying a parallel position in Ch’orti’ prayers used in healing ceremonies. These are only a few of the many lines taken from what Hull (2003:123-124) notes is a long prayer:

- 45. *Ch’a’r ak’oyer jarari’*, Lying debilitating with woven pains
- 46. *War ak’oyer ub’akyob’ che*. They are debilitating on his bones indeed.
- 57. *Ch’a’r aloch’loch’ jarari’*, Lying grabbing at him with woven pains,
- 58. *War aloch’loch’ b’akyob’ che*. They are grabbing on his bones indeed.
- 61. *Ch’a’r ajararte’ jarari’*, Lying weaving with woven pains,
- 62. *War ajararte’ b’akyob’ che*. They are weaving on his bones indeed.

Hull (2003:121-123) explains grammatically the interchange between *ch’a’r* and *war* in this way:

³⁹⁴However, copulas are not usual in any of the Mayan languages, so if this is indeed a copula, it would have to be a later innovation in Ch’orti’. The example from the dictionary is “*Uwirna’r e Jwana b’an ani kocha utu’*. El carácter de Juana era igual al de su mamá.”

The form *ch'a'r* is a past participle of the positional verb root **ch'a* (with the addition of the *-ar* past participle ending yielding *ch'a'r*). *War* is the present progressive marker In Ch'orti' healing texts, *ch'a'r* and *war* are often alternated in poetic fashion, *ch'a'r* appearing in the first line of the couplet and *war* in the second. *Ch'a'r* literally means 'lying down' but is commonly used as a near equivalent to the present progressive 'is (X-ing...)'. Therefore, in translation *ch'a'r* and *war* are synonymous in usage and in general semantics.

There are two important points to emphasize here for the present discussion. The first one is that the participle *ch'a'r* can be used, at least here in these traditional healing prayers, in parallel fashion to *war* to express the equivalent of the present progressive. That means that Ch'orti' has at least two different ways to express what can be categorized by grammarians as progressive aspect. Thus there is at least some indication here that regarding *war* as the exclusive Proto-Mayan or even Proto-Ch'olan progressive form may not be warranted. If one adds to this the evidence from Classic Ch'olan, the correct conclusion seems to be that progressive constructions did not exist as such in either Proto-Mayan or Proto-Ch'olan but were a later development.

The second important point is that grammarians should probably not be too quick to dub constructions with *war* as completely grammaticalized. It might instead, at least in traditional prayers such as this, still carry a meaning quite close to its etymological source, that is "standing." If one applies this latter approach to the passages translated by Hull and shown above, the parallelism of those couplets becomes even more pointed.

- 45. *Ch'a'r ak'oyer jarari'*, **Lying debilitating** with woven pains
- 46. *War ak'oyer ub'akyob' che*. **Standing debilitating** on his bones indeed.
- 57. *Ch'a'r aloch'loch' jarari'*, **Lying grabbing** at him with woven pains,
- 58. *War aloch'loch' b'akyob' che*. **Standing grabbing** on his bones indeed.
- 61. *Ch'a'r ajararte' jarari'*, **Lying weaving** with woven pains,
- 62. *War ajararte' b'akyob' che*. **Standing weaving** on his bones indeed.

(Modified based upon Hull 2003:123-124)

It seems then, that one should be very cautious when estimating the antiquity of the progressive form in at least the Ch’olan languages such as Ch’orti’. The evidence indicates that the original meanings of the forms used for the progressive aspect are indeed very close to the surface.

9.2.7.3.5 Progressive in Ch’ol

The forms used for the “presente actual” and the progressive aspect in Ch’ol are even more varied. It is tempting for those involved in decipherment of the Classic Ch’olan texts to zero in on a form that bears a close resemblance to, and indeed is a reflex of, lexemes that occur in those texts. However, there are several different words that are used to form the progressive aspect or a close equivalent in Ch’ol, depending upon the dialect that is being spoken (cf. Warkentin and Scott 1980:39,73; Aulie and Aulie 1998:35,142,157; Hopkins and Josserand 1988b:3). Figure 344a and b show examples of the “current present” (“presente actual”) as it is formed using *woli* in Tumbalá Ch’ol. It is used to refer to an action going on at the present time – a form with a meaning similar to the present tense in Spanish but not in English.

Ch'ol: Presente Actual (“Current Present”)			
Tumbalá			
a) <i>woli c män</i>	“yo lo compro”	“I buy it” (“I am buying it”)	
b) <i>woli' i majlel</i>	“se va”	“he/she goes” (“He/she is going)	
Tila			
c) <i>chāncol c män</i>	“yo lo compro”	“I buy it” (“I am buying it”)	
d) <i>chāncol i majlel</i>	“se va”	“he/she goes” (“He/she is going)	
Sabanilla			
e) <i>yäkel c man</i>	“yo lo compro”	“I buy it” (“I am buying it”)	
f) <i>yäkel i majlel</i>	“se va”	“he/she goes” (“He/she is going)	
(Adapted from Warkentin and Scott 1980:39)			

Figure 344. “Actual” or “current” present constructions in Ch’ol

There is another form that is closer to the English present progressive also using *woli* but followed by a preposition and the incomplete of the main verb form. Examples

of these from the three main Ch’ol dialects are shown in Figure 345a-c. Especially this construction echoes the origin of the incompletive form as a gerund by making it the object of a preposition: *woli ti tijp’el* “He/she is now – or “is positioned” – in jumping.” By definition, verbs have to be nominalized to serve as objects of prepositions.

Although *woli* is indeed

used in progressive constructions in Tumbalá Ch’ol, it is not used in Tila or Sabanilla for that purpose. Instead, in Tila as shown in Figure 344a-b and Figure 345b, a construction with a similar meaning is formed by using *chäncol* (Warkentin and Scott 1980:34). *Chän* is an adverb meaning “continuamente” (“continuously”) and “seguir haciendo” (“continue doing”) in Ch’ol (Aulie and Aulie 1998:32; Josserand and Hopkins 1988g:ch2). The origin of *kol* is perhaps not as certain but may be related to the intransitive verb *kol* “to grow” (Attinasi 1973:280) or the transitive verb “to set loose” (Hopkins and Josserand 1988g:k3). The applicability of this compound for use as an auxiliary to form the progressive is apparent based upon those etymologies.

Although *chäncol* is used by some in Sabanilla (Warkentin and Scott 1980:73), the progressive construction is usually formed there with *yäkel*, as shown in Figure 344e-f and Figure 345c. *Yäk* is a transitive verb meaning “to trap” in Ch’ol (Attinasi 1973:340; Hopkins and Josserand 1988g:y1). That may not seem very enlightening at first although it is also attested in Tzeltal and Tzotzil. Laughlin (1975:382) lists it as a verb meaning “trap, entangle” but also as an adjective meaning “continue or keep” and as an affective verb meaning “in the process of.” That makes both the connection to “trap” and its appropriateness in progressive constructions clear.

Ch’ol: Aspecto progresivo (Warkentin & Scott 1980)	
Voz Continuativa (Aulie & Aulie 1998)	
(Progressive Aspect)	
Tumbalá	
a) <i>woli ti tijp’el</i>	“él/ella está brincando” “he/she is jumping”
Tila	
b) <i>chäncol ti tijp’el</i>	“él/ella está brincando” “he/she is jumping”
Sabanilla	
c) <i>yäkel ti tijp’el</i>	“él/ella está brincando” “he/she is jumping”
(Adapted from Warkentin and Scott 1980:42)	

Figure 345. Progressive aspect constructions in Ch’ol

One could evaluate this variation in forming the progressive among the Ch'ol dialects in several ways. To be certain of the reasons for the differences, a much more detailed analysis than can be made here would be necessary. However, at least some of the possibilities will be mentioned. First, it is possible that some borrowing has taken place. The forms *yak* and *yakal* are actually used in Tzeltal and Tzotzil to form progressive constructions (see Slocum et al 1999:291,296; Delgaty and Ruíz Sánchez 1978:418). The Sabanilla Ch'ol could have borrowed *yäkel* from the neighboring Tzeltal or Tzotzil speakers. Borrowing may explain the presence of *yäkel* in Sabanilla, but the use of *chäncol* in Tila is not as easily dispatched.

Although Tumbalá is the location where the use of *woli* is attested, it is not known as the most linguistically conservative Ch'ol speaking area. Instead, Tila, where *chäncol* is used, is given that distinction by linguists who have worked extensively in that area (cf. Josserand and Hopkins 1996). Nevertheless, this could be seen as an exception to that “rule.” Tila could have simply innovated the use of *chäncol* which eventually might have ousted *woli* in progressive aspect contexts. Perhaps further investigation in the area or some earlier documentation could provide evidence as to whether that might be the case. Some late 19th century sources included in Josserand and Hopkins (1988c) list *wäle* as “today” and “now” for the Tumbalá and Tila areas, but fail to give any indication of its possible grammatical usage. A word list from the Tila area also includes *kol* as “release.” I have not found any relevant entries for either *chän* or *yäk* in these older sources.

There is another alternative as well. It is likely that finding the explanation for the dialectal differences in borrowing relies upon the assumption that the progressive construction using a reflex of *wal* is of great time depth, that is, at least sometime prior to A.D. 1492. Despite only one of the three main Ch'ol dialects having recruited *woli* for this purpose, all these dialects include various verbal and adverbial lexemes based upon the same root as *woli*. These include, among others, *wa'l*, the attributive form of an adjective meaning “standing;” *wa'*, a positional verb root meaning “stand, be in a position;” and *wäle*, an adverb meaning “now, today.” They have just not chosen to use a reflex of these forms in a progressive construction. It has already been noted several

times that there is absolutely no evidence whatsoever of any morphological progressive construction at all in Classic Ch'olan, much less one using a reflex of *wal* or *iwal*, despite the best efforts of those attempting to reconstruct one for it. Since that is the case, the progressive construction for all three of these Ch'ol dialects would have likely been created or initiated sometime after A.D. 900, assuming one has not ruled Ch'ol out a priori as a descendant of Classic Ch'olan.

Another factor to take into account is that these variants are specific to each of the three main Ch'ol communities in the Chiapas Highlands except for some crossover between *yäkel* and *chänkol* in Sabanilla. Because the specific geographical location is a determining factor in the choice of progressive morphemes, a good argument can be made that the forms developed when the inhabitants were living in their respective communities. In that case, it is important to consider that these Ch'ol populations **did not inhabit the towns of Tila and Tumbalá until the 1560s** when they were forcibly relocated there from the jungles in the northern part of the “Tzendal” province (Hopkins 1985:4). This so-called “pacification” process began in 1536. In short, it is possible that the development of the progressive aspect began around 1560. Around that time there were extreme pressures from the Spanish priests and other Spaniards in positions of power that exerted themselves upon the Ch'ol language as well. As more members of the Ch'ol-speaking community, especially those in positions of political power and with great cultural influence, learned Spanish and began to speak it, the effect upon their own native language would have accelerated. As more Ch'ol speakers became bilingual, changes in their native language due to the influence of Spanish would have likely become unavoidable.³⁹⁵

The suggestion here is that among the biggest changes, although not immediately obvious at first glance, was the development of a verbal system that revolved around tense and aspect morphemes. There is evidence that some structures of the verbal system were incorporated or “borrowed” from Spanish, but the words used to form those

³⁹⁵ Although specific evidence both historical and linguistic would be welcome, it will have to wait since neither space nor time will permit it here and now.

structures came, for the most part, from Ch'ol lexemes. They are visible especially in morphemes consisting of adverbs and verbs with meanings that, even before the lexemes became grammaticalized, were similar to morphemes that performed similar functions in the verbal system of the occupier's language.

Thus it is not necessary to assume a change in all these Ch'ol dialects from a grammaticalized present and progressive morpheme using *woli* to one using either *chänkol* or *yäkel*. Instead, these were just as likely the same morphemes first used by those populations to form those new structures. Only over time did they become increasingly grammaticalized to the extent that they are today.³⁹⁶ The choice to be made was which eligible lexeme would become the most acceptable one over time. The results were not the same in all of the locations where Ch'ol is now spoken. The newly settled Ch'ol speakers of Tila came up with *chänkol* and the Tumbalá Ch'ol speakers favored *woli*. In Sabanilla *chänkol* made inroads, but there was also a strong outside influence from the nearby Tzeltalan speakers. Sabanilla was directly in the area between the two groups who spoke that closely related language. Both Ch'olan and Tzeltalan had the same parent, called Greater Tzeltalan by Kaufman and Norman (1984). It is likely that Tzeltalan speakers had already developed a propensity to use the lexeme *yak* in these contexts and this may have been picked up by most of the Ch'ol speakers in the Sabanilla area.

Whether this “story” or theory of how these different forms came to be used in present and progressive contexts is the correct one or not, the fact remains that the direct ancestor of all these Ch'olan languages, Classic Ch'olan, did not have grammaticalized morphemes for present or progressive constructions. The lexemes that were used later for those constructions came from Classic Ch'olan, but the grammaticalized forms did not. That conclusion is not based upon a hypothetical diachronic reconstruction of this language family's history but rather upon the complete lack of evidence for anything of the sort in the texts written over 500 years before the Spanish presence.

³⁹⁶And perhaps some of them are still not as grammaticalized as some grammars and dictionaries would have us think. Studies of these languages and dialects with the purpose of determining the extent of grammaticalization of these and other verbal constructions have not yet been done.

9.2.7.4 *Iwal* in Acalan Chontal and Classic Ch'olan

Having reviewed the forms of the progressive, continuous present, and “presente actual” in the Colonial and Modern Ch'olan languages, one more question needs to be addressed. To what degree are these attested progressive and continuous present forms reflexes of the Classic Ch'olan morphemes? The gerunds that are used for progressive constructions, mainly in the case of intransitive verbs in *-el*, have already been discussed in detail in the context of the incompletive aspect. They are attested as gerunds in Classic Ch'olan, but not as part of any progressive or incompletive constructions. Another part of many of the progressive constructions just reviewed are reflexes of the lexeme *iwāl*. It too is attested, albeit rarely, in Classic Ch'olan. Glyphically it is usually written as **'i-yu-wa-la** but not as part of any grammaticalized syntactic or morphological progressive construction.

However, the absence of the progressive in the language of the people who wrote the Classic-Period texts has recently been disputed (cf. Robertson et al. 2004). The contention is that they spoke it but just did not write it. This claim has already been addressed briefly in Sections 7.1.7.4 and 7.1.7.5. However, what will be addressed here is the actual use of the Classic Ch'olan reflex of *iwāl* and whether any of the Colonial or Modern Ch'olan languages still preserve that particular use of this lexeme. In conjunction with that contention, Robertson et al. (2004:280) also dispute that the progressive played any role at all in Acalan Chontal, and so that will be addressed again as well. In order to make sure that their claim can be evaluated fairly, a few brief quotes concerning the stages of the progressive systems they reconstruct will be reproduced here.

In describing their Stage II progressive pattern which they say was present in their “Classic Ch'olti'an” (Classic Ch'olan) language, Robertson et al. (2004:272) note that **“the nominative/accusative opposition is restricted to the progressive, with a strictly syntactic focus.”** However, when seeking to provide examples they go on to note:

Although we do not have any attestation of the progressive in the hieroglyphic script, we are confident that the progressive was something like *ongoing erg-

intransitive (e.g., **iyuwal u-tal-el*, ongoing erg3sg-come-aff, ‘he is coming’) and ongoing erg-transitive-V1 absolutive (e.g., **iyuwal u-muk-uw et*, ongoing erg3sg-bury-transitive you, ‘he is burying you’). (Robertson et al. 2004:275)

So, in effect, they find no progressive constructions in Classic Ch’olan although they have no difficulty reconstructing them. What they mention in a footnote concerning *iwal* is this:

Classic-era inscriptions do record explicit spellings of *iyuwal*, the ancestor of Ch’olti’ *yual* and Acalan *yuual*. The best examples of this rare expression come from Copan Stela J, dating to a.d. 702. This text makes it clear that *iyuwal* was, at this stage, an independent adverbial, since it could precede verbs and chronological notations without verbal morphology. Most likely, the adverbial, probably meaning ‘and now’, was later recruited to form the progressive.

Of course, A.D. 702 is already relatively late in the Classic Period and there are no later examples indicating that it had begun being used in progressive constructions. So the first two Ch’olan languages that record *iwal* are Acalan Chontal and Ch’olti’. Of the appearance of *iwal* in those two Colonial-Period languages, Robertson et al. (2004:280) go on to note:

Indeed, even a casual look at Ch’olti’ reveals a language whose split-ergativity correlates with the progressive (*yual u-tal-el*, ‘he is coming now’), as compared to Acalan, which no longer even requires *iual*: *u-tal-el*, ‘he is coming’; *iual* is now a discourse marker, totally separated from the construction described in Stage II (Figure 10.12). Ch’ol has an inflectional system that is substantially further developed.

What is unusual about this statement made by Robertson et al. is that they describe the usage of *iwal* in Acalan Chontal as representing a much later stage of development in which “*iwal* is now a discourse marker totally separated from the construction described in Stage II.” In other words, it is not a grammaticalized part of any progressive aspect construction. That is very similar to the above quote from them about the use of *iwal* in Classic Ch’olan, that is, “This text makes it clear that *iyuwal* was, at this stage, an independent adverbial.” In sum, their own statements make it abundantly clear that *iwal* in Acalan Chontal functions grammatically in much the same way as it does in the Classic Period texts, that is, as an independent lexeme. Ch’olti’, on the other hand, has innovated and is beginning to use *iwal* in what has begun to become a grammaticalized progressive aspectual construction. If one considers *iwal* alone, **Acalan Chontal is clearly the language that most faithfully carries on the usage directly attested in Classic Ch’olan.**

As noted earlier in this study and again here by Robertson et al., there is in Classic Ch’olan an adverbial form of *iwal* “now, then” which is clearly attested glyphically as **’i-yu-wa-la**, probably transcribed best simply as *iwal* (or perhaps *i wal*). I am in agreement with Robertson et al. that the first part of this compound represents the discourse marker *i* as stated earlier in this study and elsewhere (cf. Wald 1998b:4). We have also noted that in both Classic Ch’olan and in Acalan Chontal it functions as an adverb and is not grammaticalized as a part of a progressive verbal construction.

In addition, it should also be noted that the Ch’ol word *wäle* is doubtless another modern relative of **yu-wa-la** which, as is the *wal* of *iwal* itself, related etymologically to *wa*’ “stand, stand upright, be in an upright position.” It is identified as an adverb meaning “now, today” (Aulie and Aulie 1998:138). Similarly, *wariwar* (or *warwar*) is an adverb in Ch’orti’ meaning “hace un ratito, ahorita, estar en acción, al instante” (“in a little while, this very moment, be in action, immediately”) (Pérez Martinez et al. 1996:248). This means that in addition to being used in progressive constructions, related words exist in these languages carrying meanings closer to those of *yuual/yual* (*iwal*) in Acalan Chontal (cf. Paxbolon et al. 1614:164.12, 166.25-26 and elsewhere) and **’i-yu-wa-la** (*i*

wal) in the Classic inscriptions where it is clearly not involved at all in forming a progressive aspectual construction.

There is another approach to the different forms that occur in all of these Ch'olan languages that likely comes even closer to the truth. First of all, since in Ch'olti' the spelling of the word in question alternates between *yual* and *iwal* (cf. Morán 1935a:9, 13), and because *y* is used in other words where /i/ is the only possibility, for example in “*ylla* por ver,” (“to see”) (Morán 1935a:3), the word in Ch'olti' must be *iwal*.³⁹⁷ When this is compared to Tumbalá Ch'ol and Ch'orti' whose forms *woli* and *war* regularly function in a similar way, one has to question why the beginning /i/ is not present in those languages. I believe it is because Ch'orti' employs a combination of *i* (*y*) which is the equivalent of the Ch'ol *i* as proposed by Hopkins and Josserand, and *wal* which is related directly to Ch'orti' *war* and Ch'ol *wäle*. As noted by Morán, this combination in Ch'olti' means “actualmente” (“in the present, now, right now”) in Spanish. In context, Morán usually translates this as the simple present in Spanish, sometimes with the word “actualmente” and sometimes not, followed by a possessed nominalized verb as shown in Figure 342 above.

The Ch'olti' form begins with the conjunction *i*, which as a focus marker might be translated as “and, and then.” If Morán is correct about Ch'olti' – and we unfortunately have no other primary source for the language – the second part of the compound, *wal*, has meaning of “now.”³⁹⁸ It seems to be that meaning which has prevailed over the connotations of the first part “and then.” For the native Spanish speaker Morán, it matched more closely the “presente actual,” the “immediate” or “simple” present. Since an auxiliary or adverb was needed with the verb to arrive at that meaning, the form itself actually resembled more the present progressive. Because immediacy is stressed by *iwal*, it is then recognized by Morán as what distinguishes the present from the preterit. In

³⁹⁷Note also that Stross (1990) transcribes the word in the entry “actualidad - *yual*” as *iwal*.

³⁹⁸It should be noted, however, that its etymological source is indeed *wa 'l*, “standing” or “be in an upright position” as has already been noted.

reality, *iwal* “and now” is used with the possessed nominalized gerund form to approximate as much as possible the present tense.

- a. *Yuual uthane uthan Dios* (Paxbolon et al. 1614:167.1)
quienes entonces (podrían) decir la palabra de Dios. (Smailus 1975:94)
And now they **speak/are speaking** the word of god.
- b. *achami pachi malahix yuual chumvanix ta ahaulel Lamatazel Hainix yuual uchelen gouernar* (Paxbolon et al. 1614:162.33-163.1-2)
Murió Pachimalahix, **luego se hizo cargo** del señorío Lamatazel (Smailus 1975:69:2-3)
He died, Pachimalahix, **then he was seated** in kingship/reign Lamatezel. This one then, he was made governor.
- c. *hain xach aHau yuual huli uchuce cabob tatenam ya tupa bolonlamat terminos uthanceli* (Paxbolon et al. 1614:155:29-31)
Éste era rey **cuando vino** a tomar el pueblo (de?) Tatenam, situado atrás de Bolonlamat, que es llamado Términos (Smailus 1975:28)
This one, you know, was king **then when it came about** its conquering, the town of Tatenam at its back [i.e. “is behind”] *B’olonlamat* which is called Terminos.

Figure 346. Some examples in context of *yuual* in Acalan Chontal document

After examining the compound form of *i* and *wal* in Ch’olti’, it is worth comparing it with Acalan Chontal to see if there are similarities (see Figure 346a-c). First, the form *yuual* itself as actually preserved in the manuscript does betray a close resemblance, at least superficially to Ch’olti’ *yual*. Could it be that *yuual* also represents a compound consisting of *i* and *wal*? The evidence for this is not as certain as it is for Ch’olti’ *yual*, but it is still the most likely interpretation. The letter *y* is attested as representing an /i/ as well as a /y/ in the *Paxbolon-Maldonado Papers*’ orthography, for example *Itzamkanac* is written as *ytzankanaac* (Paxbolon et al. 1614:159.16). That leaves us with only the first *u* in *yuual* to contend with. Elsewhere, such as in the word *uinic*, one *u* suffices to write the sound /w/. However, it may be that the first *u* of *yuual* is meant to represent a glide from the /i/ to the /w/.³⁹⁹ If so, it would be essentially identical to the Ch’olti’ form *yual*.

³⁹⁹Note that this conclusion agrees with the view of Robertson et al. (2004:275) but was reached independently.

Assuming one accepts the etymological equivalency and phonetic similarity of the spellings *iwal*, *yual*, and *yuual*, one should not overlook the semantic or at least functional difference between Morán's Ch'olti' *iwal/yual* and Paxbolon-Maldonado's Chontal *yuual*. Figure 346 shows some examples of how *yuual* is used in Acalan Chontal. The verb in the first example (Figure 346a) is in the incompletive aspect and *yuual* could, in isolation, theoretically be interpreted as heading a progressive construction. Still, the other two passages (Figure 346b-c), and many more not included here, attest that *yuual* can be used in completive contexts such as in the first occurrence of *yuual* in Figure 346b: *yuual chumvanix ta ahaulel Lamatazel* "then he was seated in kingship/reign *Lamatazel*." In almost every case in the *Paxbolon-Maldonado Papers*, Smailus translates *yuual* as *luego* "then." However, in some contexts such as that of the second occurrence of *yuual* in Figure 346b, a translation of "now" might be also appropriate as in *Hainix yuual uchelen gouernar* "It was now his being made ["He was now made"] governor." The context is clearly past time, signaled by *hainix* but it is followed by a possessed nominal which eventually developed into the incompletive. It is clearly not the present tense but could still be interpreted as the incompletive since no end to the state of his being governor is implied by the context.⁴⁰⁰ In fact, when one considers the form *yuual uchelen* here in Acalan, it is written just as is the progressive or incompletive, Morán's "presente," in Ch'olti'. Unfortunately we do not have the luxury of natively written texts to examine whether *yual* could also be used in similar contexts in Ch'olti'.

These data from the *Paxbolon-Maldonado Papers* reinforce the statement made above that Acalan Chontal is the Ch'olan language that has best preserved the Classic Ch'olan usage and spelling of **'i-yu-wa-la** *i(y-u)wal* evidenced on Copán Stela J as shown in the passage in Figure ? above. Just as in Chontal and Ch'olti', it is a compound of the conjunction *i* and the adverb *wal*. In an orthography very similar to that of the author of the *Paxbolon-Maldonado Papers*, the author of the inscription on Copán Stela J seems to

⁴⁰⁰I suspect that this is really not too different from the basic usage and function in Ch'olti', but that Morán's search for tenses such as he knows from Spanish has prevented him from realizing this.

reflect in his or her spelling a likely glide between the sounds /i/ and /w/ created when the two words are spoken or otherwise brought together. Unlike the *yual/iwal* of Morán's Ch'olti', Paxbolon-Maldonado's Chontal reflects it in the first *u* following the initial *i* written as *y*-. The Classic Ch'olan of Stela J's scribe reflects it in both a *y* and a *u* but the sound represented may have been practically indistinguishable from that written in Acalan Chontal.

The meaning of *iwal* in both the *Paxbolon-Maldonado Papers* and on Stela J seems to be quite the same. Depending upon one's point of view, the combination could be translated into English as "and then," "then," or even "now." Technically, since *i* often serves as a discourse or focus marker, it can also serve to highlight or emphasize the action or event. *Wal* as an adverb tends to tie the event to the specific time within the discourse timeline. According to Schiffrin (1987:230), when at least one word or morpheme of a pair is used as a discourse marker rather than as a conjunction or adverb, it can be combined in otherwise impermissible ways. At any rate, the final effect is both to highlight the event and to tie it into the discursive time frame. Although the content of this portion of Stela J is not completely understood, its basic pattern is clear. It lists individually a count of years and presents a significant fact about each of them. The first sentence in Figure ? can be read as *laju'n pik* (or *haab' iwal tanlam*. "In the 10th *pik* ("baktun", 400 360-day years), then it will be in the middle [of the "*piktun*," 20 "baktun"]. The fourth states: *uxlaju'n haab' iwal makax uway(?)*. "In the 13th year, then the opening got ("will get") closed." As noted earlier, the *-ax* morpheme served as a mediopassive in Classic Ch'olan as it also does in Colonial Tzotzil, Ch'olti', and Ch'orti'. Thus *makax* can be translated as "it got closed."

An observation here that has been of great importance in several earlier discussions is that there is no hint on Stela J of anything resembling a present progressive or any progressive aspect at all. In the two oldest actually-attested languages written by native Ch'olan speakers, that of the Classic Ch'olan inscriptions and the *Paxbolon-Maldonado Papers*, *iwal* is a combination conjunction and adverb. So *wal* acts in these contexts as an adverb and not as a grammaticalized particle or auxiliary in a progressive

construction. The descendent languages have later developed progressive or progressive-like constructions. However, they did so under the influence of the forcefully imposed prevailing language of the conquerors over substantial periods of time. These developments also occurred under the influence of a clergy whose grammars and dictionaries analyzed those languages in terms of Latin and Spanish grammar. In some cases, the main texts, or the only actual ones at our disposal, are the translations of foreign language scriptures, prayers, and confessionals into those Mayan languages using those same grammars and dictionaries. Many of the dictionaries and grammars were written under orders to complete them quickly such as “the order to Fray Juan de Torres to write a grammar and dictionary of Cakchiquel and Quiché within four months” (Laughlin 1988:8).

Most of the dictionaries and grammars were not written in isolation. Laughlin (1988:8-33) provides a detailed examination of several of them in relation to *The Great Tzotzil Dictionary of Santo Domingo Zinacantan*. Despite the effect that those links and the tendency of the clergy’s efforts to center around matters of faith and doctrine, the languages themselves nevertheless developed further on their own. That is why these newly developed constructions still differ, sometimes substantially, even within dialects of the same language as we have seen in the case of Tila, Sabanilla, and Tumbalá Ch’ol, despite the homogenizing Spanish language influences and their perceptible effect upon the actual Mayan languages. Yet Robertson et al. (2004:271-277) insist that it is impossible for the progressive construction not to represent a more ancient state of the verbal morphology of those language families.⁴⁰¹ Instead, I have contended that what we see in Acalan Chontal and Classic Ch’olan, which includes no evidence of a progressive aspect and no grammaticalized use of *iwal* in conjunction with it, represents an older state of the Ch’olan language family’s verbal morphology.

⁴⁰¹As already argued earlier, this strongly held view of theirs is likely influenced by the necessity for Robertson et al. to find a rationale for the switch from a supposed Common Mayan aspectual verbal system, to a Classic Ch’olti’an tense system, and finally back to a Colonial and Modern aspectual system while at the same time using many of the same or similar morphological suffixes for the Classic-Period present tense and Colonial and Modern completive aspect.

Finally, it should also be recalled that although Acalan Chontal does not regularly make use of *iwal* to construct a progressive-like form, it does do so occasionally and also uses another combination more often to accomplish the same purpose. It uses forms of the verb *cah* “begin” followed by a possessed nominalized verb, that is, a gerund. Thus it is clearly not true that Acalan Chontal lacks the nascent “incompletive” forms, actually gerunds, that form progressive or progressive-like constructions. But using such progressive-like forms does not make it more like Classic Ch’olan. Instead, it is their lack of advanced-stage grammaticalization that makes Chontal more like Classic Ch’olan.

However, in both Acalan Chontal and Ch’olti’ these incipient progressive forms are just in the beginning stages of being grammaticalized. They stand at a stage nearer to the beginning of a process that marked a complete revamping of verb morphology. Instead of expressing temporal relationships with adverbs, adverbial enclitics, temporal nouns, and context, they began tying these temporal indicators more closely to the verbs. Instead of relying upon those indicators of time and mode along with morphemic affixes for transitivity, intransitivity, voice, mood, resultatives, and statives, they began recruiting adverbs as affixes and verbs for auxiliaries. These and other changes were part of the linguistic effects of the relatively recent meeting of languages from two different worlds with two completely different language histories. The most obvious differences were in the areas of presenting temporal and aspectual information in their verbal systems.

9.2.8 Repercussions of Findings for Reconstructions of Proto-Ch’olan

This study has proposed the absence of grammaticalized tense and incompletive-completive aspect morphology for the Ch’olan language family prior to the arrival of the Spaniards. For the Ch’olan languages, there are a large number of extant texts that extend up to the 10th century A.D. or later if one takes the codices into account. Since the codices have not been directly addressed in this study, the conclusion for the Ch’olan languages could be restated to more securely assert that at least for the period up to the virtual end of Classic-Period monumental writing around the beginning of the 10th Century, there is no convincing evidence for incompletive-completive aspect or present-

past tense morphology in the Ch'olan language family. There is also a large amount of secondary evidence pointing toward a late adoption of this type of tense and aspect morphology in the Ch'olan languages themselves. This evidence is especially manifest in the Colonial-Period Ch'olan languages. However, the evidence from early documents is less apparent in the documents written by non-native speakers. Nevertheless, there is also evidence in the modern Ch'olan languages that these verbal constructions are of relatively recent manufacture. In many cases, grammars of those languages have been written with the intent of finding constructions in them that seem similar to or compatible with those known from non-Mayan language sources.

A follow-up question might be, would the evidence of the recent origins of these tense and aspect constructions have been clear enough from the Colonial and Modern Ch'olan languages to reach such a conclusion without the Classic Ch'olan texts? There are a lot of clues that make more sense in hindsight. There are also interesting comments from some linguists made before the proposals in this present study, that have left the door open for such a conclusion, although I doubt that they were necessarily intended in that way at all. Most obvious is the one made by Kaufman and Norman concerning Proto-Ch'olan which has already been quoted, to wit, "the Ch'olan languages have restructured the original system by introducing a distinction between completive status and incompletive status" (Kaufman and Norman 1984:93). On the surface, this statement seems to completely rule out the conclusions reached in this present study. Indeed it does rule them out for a Proto-Ch'olan that is intended to go back in time prior to the 10th Century. But that is not the relevant part of their observation.

What is relevant and very important is Kaufman and Norman's conclusion that Proto-Ch'olan has completely revamped what was passed down to it in the way of incompletive and completive aspect and refashioned the whole system. It has, according to them, gone back to the basic division of verbal morphology into plain and dependent status markers and substituted an analogous division on the basis of completive and incompletive status markers. In other words, they seem to be implying that the whole family seems to have broken from what might be reconstructed for the rest of the Mayan

languages. According to them, completive and incompleted aspect was all encapsulated within the Proto-Mayan plain status and with Ch'olan's revamping of that system, it was all left behind. I do agree with the last point, that the Colonial and Modern Ch'olan incompleted and completive aspect system cannot be analyzed correctly within a reconstructed system based upon evidence of grammaticalized present-past tense and completive-incompleted aspect from the other Mayan Languages.

In regard to Proto-Ch'olan, I would modify their view of the reconstruction of incompleted and completive aspect. As I have already argued, the time depth of those reconstructions is unlikely to have reached back prior to the 16th century. For example, the minority report from Ch'orti' which lacks morphological affixes for incompleted and completive aspect is evidence of that, although clearly not strictly within the normal rules of thumb for comparative linguistics that stresses "majority rules." The same is true of their reconstruction of **wāl* as a grammaticalized progressive aspect marker (Kaufman and Norman 1984:139). In this case, Acalan Chontal, and indeed modern Chontal as well, provide the all-important minority report.⁴⁰² The Ch'ol family of dialects with its use of different unrelated forms also provides counterevidence. Still, it must be kept in mind that I have chosen the minority reports as the correct solutions only by referencing the Classic Ch'olan texts while Kaufman and Norman (1984:77) expressly rule out any explicit reference to the Classic texts. They state:

One of the objectives of this study is to provide epigraphers with a benchmark for investigating the language of the Classic Maya inscriptions. To be consistent with this objective, we must insist that linguistic reconstructions be logically independent of the findings of Maya epigraphy.

Because of the progress in decipherment since they wrote this statement, it has instead become imperative to reconcile any reconstructions with the language of the

⁴⁰²Of course, I disagree with their data that indicate Acalan Chontal uses a reflex of **wāl* as a progressive aspect marker. It is present in the Acalan Chontal document as an adverb and discourse marker, but does not serve as part of a grammaticalized progressive construction.

Classic-Period inscriptions. Classic Ch'olan is now a source to be fully mined in any reconstructions of Proto-Ch'olan and so can no longer be left out when doing so. Of course, the contrary is also true. One must be suspicious of any attempts to reconstruct verbal systems based upon hypothetical reconstructions of Classic Ch'olan. It is important to note that there is a vastly larger body of texts available for Classic Ch'olan than there are for either Acalan Chontal or Ch'olti'. What is more, the texts we have from Ch'olti' were not even written by a native speaker and, besides the grammar and vocabulary, consist mainly of translations of Christian prayers, religious instruction, and confessional aids based upon Spanish and Latin originals. Ch'olti' texts can therefore hardly be trusted implicitly as a source from which to correct what the Classic Ch'olan scribes wrote or to provide additions to verbal morphology that the Classic-Period scribes supposedly failed to include.

9.2.9 Possible Application of Findings to Other Mayan Languages

An appropriate follow-up question to the proposals made in this study might be whether any of the conclusions drawn here are applicable to Mayan languages other than Ch'olan. The main problem, of course, is that, except for a limited number of texts in Yucatecan, there are no other Pre-Columbian written texts to consult for evidence of a similar language family histories. That circumstance alone would already change the approach required to provide evidence for similar analyses of their verb systems. Evidence for the lack of present or past tense and incomplete and complete aspect prior to the 16th Century would have to come from language internal data bolstered by evidence from closely related languages and language families. Most important at the beginning, the impetus would have to come from arguments by analogy with the history of the Ch'olan language family. In the case of some languages, especially closely related ones such as the Tzeltalan language family, the evidence from Ch'olan would be more powerful and would go beyond analogy, simply because they share the same Greater Tzeltalan parent. In the case of Yucatecan, the familial relationship to Ch'olan is much more distant and the verb system less similar. However, that would make finding an

explanation for its somewhat surprising parallel adoption of a very similar pattern of aspectual morphology employing intransitive incomplete forms based upon *-Vl* gerund nominalization even more intriguing. Finding a rationale for this close parallel development of both the incomplete aspect constructions and the accompanying development of split ergativity based upon it might also be helpful for strengthening the argument for the proposed historical impetus underlying the adoption of the incomplete-completive aspect distinction in the Ch'olan languages. Because the proposal made here for the Ch'olan family suggests an independent adoption of that pattern by three sister languages that had likely already been at least partially separated, its adoption by a much less closely related cousin might provide clues that are relevant for explaining its adoption within the immediate family as well.

It is noteworthy that in reconstructing the histories of some Mayan languages, certain grammatical forms either receive scant attention or are ignored altogether. For example, the various auxiliaries that are central to most of the verbal tense and aspect constructions in Ch'ol are usually ignored when Ch'ol is being considered in conjunction with the other members of the Ch'olan family. However, some of these auxiliaries are also present in Chontal even though they do not always play the same role in each language. What is more, even if these auxiliaries are not used in the same contexts in the other Ch'olan languages, their etymological sources are often present in them. Setting aside such differences is not necessarily wrong if it is indeed preceded by a sufficient amount of detailed research and analysis into the source of those differences. Instead, this situation points out an important characteristic shared by most Mayan languages. As noted by Robertson et al. (2004:267), “for typological reasons, it is important to recognize that the movement from deictic adverbial morpheme to verbal inflectional morpheme is a phenomenon that pervades Mayan languages.” I not only agree with this statement but would also like to expand upon it to include the recruitment of adverbs, verbs and other morphemes for these purposes including all of the already cliticized temporal adverbs. I would only disagree as to the likelihood of a very ancient time depth for the grammaticalization of these morphemes as incomplete-completive and present-past

verbal inflection. All of these enclitics, adverbs, and even verbs could perform similar functions in sentences without their being grammaticalized as the verb system of Classic Ch'olan illustrates. A statement made some time ago by Hopkins and Josserand (1988a: 9, emphasis added) is especially relevant in that regard.

The Classic language is not identical to any of the modern languages, and in fact lacks features common to many of the modern languages. Support for this hypothesis may be found in comparative Mayan linguistics. The system of verbal preclitics, for instance, appears quite similar in modern Western Mayan languages, in that there is often a set of morphemes expressing tense-aspect which occur in a preverbal position. But comparative evidence indicates that these morphemes are not generally cognates, that is, they are not shared retentions from the verbal system of a common ancestor. **The argument can be made, then, that the common ancestor of these languages had no such system.**

Although the reference they are making here is to the preverbal tense and aspect adverbial clitic and auxiliary systems, the research presented in this study has simply gone one step further in regard to the Ch'olan languages. It has provided evidence that even the substratum of incompletive and completive aspect marking reconstructed for the parent of that family is not of great time depth and surely postdates the last extensive evidence from Classic Ch'olan, probably by about 600 years.

This type of research must now go beyond just Ch'olan or even just the "Western Mayan" languages. Instead of starting out with the goal of reconstructing either a present-past or incompletive-completive verbal system all the way back to Common or Proto-Mayan, the concentration at the beginning should be on the function of the various temporal and aspectual clitics and auxiliaries in each individual language. Emphasis should be on ascertaining their specific semantic content both within and outside of their specific verbal contexts. No prejudgment should be made as to their antiquity and most especially not as to their time-depth within a particular verbal construction. Comparison

should also be made within closely related members of the same language families. It would be premature at an early stage of this research to draw upon semantic similarities between widely separated languages to arrive at time-depth judgments without analyzing the semantic and formal differences in the use and function of the same morphemes within the same language family. If the range of meanings and functions varies as much within a language family as between disparate families, it is possible that only the lexical content and not the morphological forms are of a great time depth.

Robertson et al. (2004), for example, have taken an important step by attempting to characterize and compare the functions and meanings of various types of temporal adverbial clitics. However, it seems that they have taken the next step toward synthesis much too early. Even before any in-depth analysis from within a broad range of family members, Robertson et al. (2004:263, emphasis added) conclude “There seem to have been **three different types of adverbial markers of time**, the first signaling absolute time, the second relative time, and the third systematic or calendric time.” They then go on to list them in respective order:

The **first is *ix**, as conserved in Tzeltalan and Ch’olan, meaning ‘recent past’ The **second**, found largely in Ch’olan (but probably borrowed into Poqomchi’, a K’iche’an language), **is the prefix a-** . . . it shifts the completive (past) to present, and the incompleted (present) to future. The **third, systemic marker of time** . . . -*ej-eer* . . . is one of **past/nonpast**. (Robertson et al. 2004:263-264, emphasis added)

I disagree in varying degrees with the characterizations of each of these morphemes as has already been noted in other parts of this presentation. However that is not the problem that I wish to address here. Instead, what is troubling is the premature generalization of what this outline and the classification of the various forms represents. There does not seem to be enough attested evidence as yet, and they have not presented any such evidence, to reconstruct them as members of a class, each performing their

specified functions as adverbial markers of time within any synchronic language, whether reconstructed or actual. My disagreement becomes even more marked in light of another generalization made by Robertson et al. (2004:267) in regard to the first and third of these proposed “systemic marker(s) of time.” This generalization is that, “The Common Mayan adverbial markers of tense, **ix*, ‘recent past’, and **-eey*, ‘past’, both figure prominently in the tense/aspectual history of the Mayan languages.” Problematic here is the classification of these enclitics as “markers of **tense**” all the way back to “Common Mayan.” As yet I have seen no secure or convincing evidence of this tense marking in Common Mayan – “tense” being “grammaticalized expression of location in time” (Comrie 1985:9). However, I would also add that I have seen no secure or convincing evidence of any grammaticalized incomplete-completive aspect marking in Common Mayan or Proto-Mayan either.

Nevertheless, these enclitics, along with others, clearly do play an important role in many Mayan languages and are sorely in need of further Pan-Mayan comparative study. It is only from studies that attempt to avoid prejudgments that evidence can be gathered to test whether the absence of grammaticalized tense and incomplete-completive aspect is indeed a Proto-Mayan characteristic. In the meantime, I hope that review by other linguists and epigraphers of the evidence presented here in favor of exactly that analysis of Classic-Period texts will both confirm the basic judgment that present-past tense and incomplete-completive aspect are not morphologically marked in Classic Ch’olan. Further research should help to ascertain whether there is any secure evidence of their being marked in any of the Pre-Columbian Mayan languages.

References Cited

- Adams, Richard E. W.
 1986 Río Azul: Lost City of the Maya. *National Geographic Magazine* 169(4), pp. 420-451.
- Andersen, Torben
 1994 From Aspect to Tense in Lulubo: Morphosyntactic and Semantic Restructuring in a Central Sudanic Language. In *Tense, Aspect and Action*, edited by Carl Bache and Hans Basbøll, pp. 235-263. The Hague: Mouton de Gruyter.
- Anderson, Lloyd B.
 1982 "Perfect" as a Universal and as a Language-Specific Category. In *Tense-Aspect*, edited by Paul J. Hopper, pp. 227-264. Amsterdam: John Benjamins Publishing Co..
 1993 *The Writing System of La Mojarra and Associated Monuments, 2nd Ed.: 2 Volumes*. Washington: Ecological Linguistics.
- Andrews, E. Wyllys, V, and Barbara W. Fash
 1992 Continuity and Change in a Royal Maya Residential Complex at Copán. *Ancient Mesoamerica* 3(1), pp. 63-88.
- Ara, Domingo de, and Mario Humberto Ruz
 1986 *Vocabulario de Lengua Tzeltal segun el Orden de Copanabastla*. Mexico: Universidad Nacional Autónoma de México.
- Attinasi, John Joseph
 1973 *Lak T'an: A Grammar of the Chol (Mayan) Word*. Ph. D. Dissertation, Dept. of Anthropology, University of Chicago.
- Aulie, H. Wilbur, and Evelyn W. de Aulie
 1978 *Diccionario Ch'ol: Ch'ol - Español, Español Ch'ol*. Mexico: Instituto Lingüístico de Verano.
 1998 *Diccionario Ch'ol de Tumbalá, Chiapas: Con variaciones dialectales de Tila y Sabanilla*. reedited by Emily F. Scharfe de Stairs Mexico: Instituto Lingüístico de Verano.
- Ayala Falcón, Maricela
 1995 *The History of Toniná through its Inscriptions*. Ph.D. dissertation, University of Texas at Austin.
 1997 Who Were the People of Toniná?. In *Language of Maya Hieroglyphs*, edited by Martha J. Macri and Anabel Ford, pp. 69-75. San Francisco: Pre-Columbian Art Research Institute.

- Bache, Carl, Hans Basbøll, and Carl-Erik Lindberg, editors.
 1994 *Tense, Aspect and Action: Empirical and Theoretical Contributions to Language Typology*. The Hague: Mouton de Gruyter.
- Bakhtin, Mikhail M.
 1981 *The Dialogic Imagination: Four Essays*. Translated by Caryl Emerson and Michael Holquist. Austin: University of Texas Press.
 1986 *Speech Genres & Other Late Essays*. Translated by Vern W. McGee and Caryl Emerson. Austin: University of Texas Press.
 1990 *Art and Answerability: Early Philosophical Essays by M. M. Bakhtin*. Translated by Michael Holquist and Vadim Liapunov. Austin: University of Texas Press.
- Barrera Vásquez, Alfredo, Juan Ramon Bastarrachea Manza, and William Brito Sansores, eds.
 1980 *Diccionario Maya Cordemex, Maya-Español, Español Maya*. Merida: Ediciones Cordemex.
- Bassie-Sweet, Karen
 1991 *From the Mouth of the Dark Cave: Commemorative Sculpture of the Late Classic Maya*. Norman: University of Oklahoma Press.
- Basso, Keith H.
 1989 The Ethnography of Writing. In *Explorations in the Ethnography of Speaking, Second Edition*, edited by Richard Bauman and Joel Sherzer, pp. 425-432. Cambridge: Cambridge University Press.
- Baudez, Claude F.
 1983 *Introducción a la Arqueología de Copán, Honduras, Tomo II: Baudez*. Tegucigalpa: Proyecto Arqueológico Copán.
- Baudez, Claude-François
 1994 *Maya Sculpture of Copán: The Iconography*. Norman: University of Oklahoma Press.
- Baudez, Claude F., and Anne S Dowd
 1983 La Decoracion del Templo. In *Introducción a la Arqueología de Copán, Honduras, Tomo II*, edited by Claude F. Baudez, pp. 447-479. Tegucigalpa: Proyecto Arqueológico Copán.
- Becerra, Marcos E.
 1935 Vocabulario de la lengua chol que se habla in el Distrito de Palenque del Estado de Chiapas. *Anales del Museo Nacional de Arqueología, Historia y Etnografía*, 5a. epoca 2, pp. 249-278.

- Beetz, Carl P., and Linton Satterthwaite
 1981 *The Monuments and Inscriptions Caracol, Belize*. Philadelphia: The University Museum, University of Pennsylvania.
- Benito Pérez, José Gonzalo
 1994 *Manual de Redacción Poqomam: Rukorb'aal Tz'ihb'anik Poqomam Q'orb'al*. Guatemala: Editorial Cholsamaj.
- Berdan, Frances F., and Patricia Reiff Anawalt
 1992 *The Codex Mendoza*. Four Volumes. Berkeley: University of California Press.
- Berlin, Heinrich
 1958 El Glifo "Emblema" in las Inscripciones Mayas. *Journal de la Société des Américanistes*, n. s. 47, pp. 111-119.
 1959 Glifos Nominale en el Sarcófago de Palenque. *Humanidades* 2(10), pp. 1-8.
- Berry, George Ricker
 1958 *The Classic Greek Dictionary: Greek-English and English-Greek*. New York: Follett Publishing Company.
- Bolles, David
 2001 *Combined Dictionary-Concordance of the Yucatecan Mayan Language*. Crystal River: FAMSI <<http://www.famsi.org/reports/96072/index.html>>, reference checked 2/15/2007.
- Bolles, John S.
 1977 *Las Monjas: A Major Pre-Mexican Architectural Complex at Chichén Itzá*. Norman: University of Oklahoma Press.
- Boot, Erik
 1998 *The Yucatec Maya Dance Festival of Fire and the Inscriptions at Chich'en Itsa, Yucatan*. Unpublished manuscript, pp. 1-21.
 2003 *A Preliminary Classic Maya-English/English-Classic Maya Vocabulary of Hieroglyphic Readings*. Mesoweb.
 <www.mesoweb.com/resources/vocabulary/Vocabulary.pdf>
- Bourdieu, Pierre
 1977 *Outline of a Theory of Practice*. Translated by Richard Nice. Stanford: Stanford University Press.
 1990 *The Logic of Practice*. Translated by Richard Nice. Stanford: Stanford University Press.

Bricker, Victoria R.

- 1977 *Pronominal Inflection in the Mayan Languages*. New Orleans: Middle American Research Institute, Tulane University.
- 1981 The Source of the Ergative Split in Yucatec Maya. *Journal of Mayan Linguistics* (2), pp. 83-127.
- 1985 A Morphosyntactic Interpretation of Some Accession Compounds: and Some Other Verbs in the Mayan Hieroglyphs. In *Fourth Palenque Round Table, 1980*, edited by Merle Greene Robertson and Elizabeth P. Benson, pp. 67-86. San Francisco: Pre-Columbian Art Research Institute.
- 1986 *Grammar of Mayan Hieroglyphs*. New Orleans: Middle American Research Institute, Tulane University.
- 1995 Advances in Maya Epigraphy. *Annual Review of Anthropology* 24, pp. 215-235.
- 2000 Bilingualism in the Maya Codices and the Books of Chilam Balam. *Written Language and Literacy* 3(1), pp. 77-115.

Bricker, Victoria R., and Harvey M. Bricker

- 1986 The Mars Table in the Dresden Codex. In *Research and Reflections in Archaeology and History*, edited by E. Wyllys Andrews, V, pp. 51-80. New Orleans: Middle American Research Institute, Tulane University.

Bricker, Victoria R., Eleuterio Po'ot Yah, and Ofelia Dzul de Po'ot

- 1998 *A Dictionary of the Maya Language: As Spoken in Hocabá, Yucatán*. Salt Lake City: The University of Utah Press.

Brinton, Daniel G.

- 1882 Introduction: The Graphics System and Ancient Records of the Mayas. In *Contributions to North American Ethnology, Volume V*, edited by J. W. Powell, pp. 17-37. : Department of the Interior.

Bubenik, Vit

- 1997a The Verbal System of Vedic and Classical Sanskrit. In *Tense and Aspect in Indo-European Languages*, edited by John Hewson and Vit Bubenik, pp. 46-65. Amsterdam: John Benjamins Publishing Company.
- 1997b Development of Modern Indic Tense-Aspect System. In *Tense and Aspect in Indo-European Languages*, edited by John Hewson and Vit Bubenik, pp. 265-282. Amsterdam: John Benjamins Publishing Company.

- Bybee, Joan, Revere Perkins, and William Pagliuca
 1994 *The Evolution of Grammar: Tense, Aspect, and Modality in the Languages of the World*. Chicago: University of Chicago Press.
- Campbell, Lyle
 1984 The Implications of Mayan Historical Linguistics for Glyphic Research. In *Phoneticism in Mayan Hieroglyphic Writing*, edited by John S. Justeson and Lyle Campbell, pp. 1-16. Albany: Institute for Mesoamerican Studies.
 1999 *Historical Linguistics: An Introduction*. Cambridge: The MIT Press.
- Cárdenas, John
 2004 Judeo-Spanish and the Lexicalist Morphology Hypothesis: A Vindication of Inflectional and Derivational Morphology. *California Linguistic Notes* 19(1), pp. 1-24.
- Carrasco, Michael D.
 2005 *The Mask Flange Iconographic Complex: The Art, Ritual, and History of a Maya Sacred Image*. Austin: Ph.D. dissertation, University of Texas at Austin.
- Chase, Arlen F., Nikolai Grube, and Diane Z. Chase
 1991 Three Terminal Classic Monuments from Caracol, Belize. *Research Reports on Ancient Maya Writing* 36, pp. 1-18.
- Coe, Michael D.
 1973 *The Maya Scribe and His World*. New York: The Grolier Club.
 1975 *Classic Maya Pottery at Dumbarton Oaks*. Washington: Dumbarton Oaks Trustees for Harvard University.
 1982 *Old Gods and Young Heroes: Pearlman Collection of Maya Ceramics*. Photographs by Justin Kerr. Jerusalem: Israel Museum.
 1999 *Breaking the Maya Code, Revised Edition*. New York: Thames & Hudson.
- Coe, William R.
 1967 *Tikal: Handbook of the Ancient Maya Ruins*. Philadelphia: University of Pennsylvania.
- Comrie, Bernard
 1976 *Aspect: An Introduction to the Study of Verbal Aspect and Related Problems*. Cambridge: Cambridge University Press.
 1985 *Tense*. Cambridge: Cambridge University Press.

- Crystal, David
 1987 *Cambridge Encyclopedia of Language*. Cambridge: Cambridge University Press.
- 1992 *An Encyclopedic Dictionary of Language and Languages*. Cambridge: Blackwell Publishers.
- Culbert, T. Patrick
 1993 *The Ceramics of Tikal: Vessels from the Burials, Caches and Problematical Deposits. Tikal Report No. 25, Part A* Philadelphia: The University Museum.
- Dahl, Östen
 1985 *Tense and Aspect Systems*. Oxford: Blackwell.
- Dayley, Jon P.
 1981 Voice and Ergativity in Mayan Languages. *Journal of Mayan Linguistics* 2(2), pp. 3-82.
- 1985 *Tzotujil Grammar*. Berkeley: University of California Press.
- Delgaty, Alfa Hurley Vda.de, and Agustín Ruíz Sánchez
 1978 *Diccionario Tzotzil de San Andrés con Variaciones Dialectales*. Mexico: Summer Institute of Linguistics.
- Diego Antonio, Diego de, Francisco Pascual, and Nicolas de Nicolas Pedro
 1996 *Diccionario del Idioma Q'anjob'al*. Antigua: Proyecto Lingüístico Francisco Marroquín.
- Dixon, Robert M. W.
 1994 *Ergativity*. Cambridge: Cambridge University Press.
- 1997 *The Rise and Fall of Languages*. Cambridge: Cambridge University Press.
- DuBois, John W.
 1987 The Discourse Basis of Ergativity. *Language* 63(4), pp. 805-855.
- Edmonson, Munro S.
 1986 *Heaven Born Merida and Its Destiny: Book of Chilam Balam of Chumayel*. Austin: University of Texas Press.
- England, Nora C.
 1988 *Introducción a la Lingüística: Idiomas Mayas*. Antigua: Proyecto Lingüístico Francisco Marroquín.

- England, Nora C., and Stephen R. Elliott, editors.
 1990 *Lecturas sobre la Lingüística Maya*. Antigua: Centro de Investigaciones Regionales de Mesoamerica.
- Fagan., Sarah M.B.
 1992 *The Syntax and Semantics of Middle Constructions: A Study with Special Reference to German*. Cambridge: Cambridge University Press.
- Fahsen, Federico
 1988 A New Early Classic Text from Tikal. *Research Reports on Ancient Maya Writing* 17, pp. 1-8.
- Feldman, Lois
 1986 A Sketch of Tumbala Chol Stem Formation. *Journal of Mayan Linguistics* 5(2), pp. 17-53.
- Fisher, William Morrison
 1973 *Towards the Reconstruction of Proto-Yucatec*. University of Chicago.
- Foley, William A., and Robert D. Van Valin
 1985 Information Packaging in the Clause. In *Language Typology and Syntactic Description, Volume 1*, edited by Timothy Shopen, pp. 282-364. Cambridge: Cambridge University Press.
- Foreman, Grant
 1938 *Sequoyah*. Norman: University of Oklahoma Press.
- Förstemann, Ernst W.
 1904a The Inscription on the Cross of Palenque. In *Mexican and Central American Antiquities, Calendar Systems, and History*, edited by Charles P. Bowditch, pp. 545-556.
 1904b From the Temple of the Inscriptions at Palenque. In *Mexican and Central American Antiquities, Calendar Systems, and History*, edited by Charles P. Bowditch, pp. 573-580.
 1904c Three Inscriptions of Palenque. In *Mexican and Central American Antiquities, Calendar Systems, and History*, edited by Charles P. Bowditch, pp. 581-589.
- Fought, John G.
 1967 *Chorti (Mayan): Phonology, Morphophonemics, and Morphology*. New Haven: Yale University.
 1984 Choltí Maya: A Sketch. In *Handbook of Middle American Indians, Volume Supplement 2*, edited by Munro S. Edmonson and Patricia A. Andrews, pp. 43-55. Austin: University of Texas Press.

- Fought, John G., and Sarah S. Fought
 1972 *Chorti (Mayan) Texts (I)*. Philadelphia: University of Pennsylvania Press.
- Fox, Anthony
 1995 *Linguistic Reconstruction: An Introduction to Theory and Method*. Oxford: Oxford University Press.
- Fox, James A., and John S. Justeson
 1980 Mayan Hieroglyphs as Linguistic Evidence. In *Third Palenque Round Table, 1978, Part 2*, edited by Merle Greene Robertson, pp. 204-216. Austin: University of Texas Press.
- 1984a Polyvalence in Mayan Hieroglyphic Writing. In *Phoneticism in Mayan Hieroglyphic Writing*, edited by John S. Justeson and Lyle Campbell, pp. 17-76. Albany: Institute for Mesoamerican Studies.
- 1984b Appendix C: Conventions for Transliteration of Mayan Hieroglyphs. In *Phoneticism in Mayan Hieroglyphic Writing*, edited by John S. Justeson and Lyle Campbell, pp. 363-366. Albany: Institute for Mesoamerican Studies.
- Furbee-Losee, Louanna
 1976 *The Correct Language: Tojolabal: A Grammar with Ethnographic Notes*. New York: Garland Publishing, Inc.
- Gates, William
 1978 *An Outline Dictionary of Maya Glyphs: With a Concordance and Analysis of Their Relationships*. New York: Dover Publications, Inc.
- Gelb, Ignace J.
 1963 *A Study of Writing*. Chicago: University of Chicago Press.
- 1981 Forms of Writing. In *Encyclopaedia Britannica*, edited by Philip W. Goetz and Bruce L. Felknor, pp. 1033-1045. Chicago: Encyclopaedia Britannica, Inc.
- Givón, Talmy
 1979 *On Understanding Grammar*. Academic Press.
- Glassman, Gary
 2001 *Lost King of the Maya*. PBS Airdate: February 13, 2001. NOVA\ Transcripts. <<http://www.pbs.org/wgbh/nova/transcripts/2804maya.html>>, reference checked 2/15/2007.

Goodman, J. T.

- 1897 The Archaic Maya Inscriptions: Appendix. In *Biologia Centrali-Americana, Archaeology, Volume VI*, edited by F. Ducane Godman, and Osbert Salvin. London: R. H. Porter and Dulau & Co. Facsimile edition 1974. New York: Milpatron Publishing Corp.

Graham, Ian

- 1967 *Archaeological Explorations in El Peten, Guatemala*. New Orleans: Middle American Research Institute, Tulane University.
- 1978 *Corpus of Maya Hieroglyphic Inscriptions # 2.2: Naranjo, Chunhuitz, Xunantunich*. Cambridge: Peabody Museum.
- 1979 *Corpus of Maya Hieroglyphic Inscriptions # 3.2: Yaxchilan*. Cambridge: Peabody Museum.
- 1980 *Corpus of Maya Hieroglyphic Inscriptions # 2.3: Ixkun, Ucanal, Ixtutz, Naranjo*. Cambridge: Peabody Museum.
- 1982 *Corpus of Maya Hieroglyphic Inscriptions # 3.3: Yaxchilan*. Cambridge: Peabody Museum.

Graham, Ian, and Eric von Euw

- 1975 *Corpus of Maya Hieroglyphic Inscriptions # 2.1: Naranjo*. Cambridge: Peabody Museum.
- 1977 *Corpus of Maya Hieroglyphic Inscriptions # 3.1: Yaxchilan*. Cambridge: Peabody Museum.

Graham, Ian, and Peter Mathews

- 1996 *Corpus of Maya Hieroglyphic Inscriptions # 6.2: Tonina*. Cambridge: Peabody Museum.

Graham, John A.

- 1972 *Hieroglyphic Inscriptions & Monumental Art of Altar de Sacrificios*. Cambridge: Peabody Museum.
- 1990 Monumental Sculpture and Hieroglyphic Inscriptions. In *Excavations at Seibal, Memoirs Volume 17*, edited by Gordon R. Willey and John A. Graham, pp. 1-79. Cambridge: Peabody Museum of Archaeology and Ethnology.

Greene Robertson, Merle

- 1983 *The Sculpture of Palenque, Volume I: Temple of the Inscriptions*. Princeton: Princeton University Press.

- 1991 *The Sculpture of Palenque, Volume IV: The Cross Group, the North Group, The Olvidado, and Other Pieces*. Princeton: Princeton University Press.

Grube, Nikolai

- 1987 Notes on the Reading of Affix T142. *Research Reports on Ancient Maya Writing* 4, pp. 1-6.
- 1989a *A Glyph for way (Sorcery, Nagual, Transformation)*. A letter circulated among epigraphers dated Sept. 10, 1989. pp. 1-11. Unpublished.
- 1989b *The 819-Day-Count Verb as a Logograph for WA'*. Notebook notes dated November 4, 1989 circulated among epigraphers. pp. 1-6. Unpublished.
- 1989c *Way, wayib, and waybil*. Letter to David S. Stuart and Stephen D. Houston of November 15, 1989 circulated among epigraphers. pp. 1-6. Unpublished.
- 1990 *Die Entwicklung der Mayaschrift: Grundlagen zur Erforschung des Wandels der Mayaschrift*. Berlin: Verlag von Flemming.
- 1992 Classic Maya Dance: Evidence from Hieroglyphs and Iconography. *Ancient Mesoamerica* 3(2), pp. 201-218.
- 1994a Observations on the History of Maya Hieroglyphic Writing. In *Seventh Palenque Round Table, 1989*, edited by Merle Greene Robertson and Virginia M. Fields, pp. 177-186. San Francisco: Pre-Columbian Art Research Institute.
- 1994b Epigraphic Research at Caracol, Belize. In *Studies in the Archaeology of Caracol, Belize*, edited by Arlen F. Chase and Diane Z. Chase, pp. 83-122. San Francisco: Pre-Columbian Art Research Institute.
- 1998 Speaking Through Stones: A Quotative Particle in Maya Hieroglyphic Inscriptions. In *50 Years Americanist Studies at the University of Bonn*, edited by Sabine Dedenbach-Salazar Sáenz and Carmen Arellano Hoffmann, pp. 543-558. Markt Schwaben: Verlag Anton Saurwein.
- 2001a *Maya: Divine Kings of the Rainforest*. Cologne: Könemann.
- 2001b *Notebook for the XXVth Maya Hieroglyphic Forum at Texas*. Austin: University of Texas at Austin.
- 2001c Appendix Figures. In *Archaeological Reconnaissance in Southeastern Campeche, México: 2001 Field Season Report*, edited by Ivan Sprajc. Crystal River: FAMSI. <<http://www.famsi.org/reports/00016/index.html>>, reference checked 2/15/2007.

- 2003 *Notebook for the XXVIIth Maya Hieroglyphic Forum at Texas*. Austin: Maya Workshop Foundation.
- 2004a The Orthographic Distinction between Velar and Glottal Spirants in Maya Hieroglyphic Writing. In *Linguistics of Maya Writing*, edited by Søren Wichmann, pp. 61-81. Salt Lake City: University of Utah Press.
- 2004b Patronage, Betrayal, and Revenge: Diplomacy and Politics in the Eastern Maya Lowlands. *Notebook for the XXVIIIth Maya Hieroglyphic Forum at Texas*, pp. 1-95.
- 2004c *Notebook for the XXVIIIth Maya Hieroglyphic Forum at Texas*. Austin: University of Texas at Austin.
- Grube, Nikolai, Alfonso Lacadena, and Simon Martin
- 2003a Chichen Itza and Ek Balam: Terminal Classic Inscriptions from Yucatan. *Notebook for the XXVIIth Maya Hieroglyphic Forum at Texas*, pp. 1-84.
- 2003b *Proceedings of the Maya Hieroglyphic Workshop, 2003, March 8-9: Chichen Itzá and Ek' Balam*, edited by Phillip Wanyerka.. Cleveland: Phil Wanyerka.
- Grube, Nikolai, and Werner Nahm
- 1990 A Sign for the Syllable mi. *Research Reports on Ancient Maya Writing* 31, pp. 15-26.
- Grube, Nikolai, and Linda Schele
- 1995 The Last Two Hundred Years of Classic Maya History: Transformation, Termination, Transformation. In *Notebook for the XIXth Maya Hieroglyphic Workshop at Texas*, edited by Linda Schele and Nikolai Grube, pp. 87-211. Austin: University of Texas at Austin.
- Grube, Nikolai, and Simon Martin
- 1998 Deciphering Maya Politics. In *Notebook for the XXIIInd Maya Hieroglyphic Forum at Texas*, edited by Linda Schele, pp. 1-95. Austin: University of Texas at Austin.
- 2001 The Dynastic History of the Maya. In *Maya: Divine Kings of the Rainforest*, edited by Nikolai Grube, pp. 149-171. Cologne: Könemann.
- Grube, Nikolai, Simon Martin, and Marc Zender
- 2002 Palenque and Its Neighbors. In *Notebook for the XXVIth Maya Hieroglyphic Forum at Texas*, edited by Linda Schele and Nikolai Grube, pp. 1-66. Austin: University of Texas at Austin.

- Grube, Nikolai, and Werner Nahm
 1994 A Census of Xibalba: A Complete Inventory of Way Characters on Maya Ceramics. In *Maya Vase Book, Volume 4*, edited by Justin Kerr and Karl A. Taube, pp. 686-715. New York: Kerr Associates.
- Guzmán, Alonso de
 1620 *Vocabulario en lengua tzeldal de Copanabastla*. Philadelphia: Van Pelt Library, University of Pennsylvania.
- Hanks, William F.
 1990 *Referential Practice: Language and Lived Space among the Maya*. Chicago: University of Chicago Press.
- Harris, Martin
 1982 The 'Past Simple' and the 'Present Perfect' in Romance. In *Studies in the Romance Verb*, edited by Nigel Vincent and Martin Harris, pp. 42-70. London: Croom Helm.
- Havelock, Eric A.
 1982 *The Literate Revolution in Greece and Its Cultural Consequences*. Princeton: Princeton University Press.
- Haviland, John B.
 1981 *Sk'op Sotz'leb: El Tzotzil de San Lorenzo Zinacantán*. México: Universidad Nacional Autónoma de México.
- 1988 It's My Own Invention: A Comparative Grammatical Sketch of Colonial Tzotzil. In *Great Tzotzil Dictionary of Santo Domingo Zinacantán, Volume I: Tzotzil-English*, edited by Robert M. Laughlin, pp. 79-121. Washington: Smithsonian Institution Press.
- 1999 *Sk'op Sotz'leb: The Tzotzil of Zinacantán*. Translated by Stuart P. Robinson and edited by Esteban Gutierrez. <<http://www.zapata.org/Tzotzil/>>, reference checked 2/15/2007.
- Hewson, John, and Vit Bubenik
 1997a *Tense and Aspect in Indo-European Languages*. Amsterdam: John Benjamins Publishing Company.
- 1997b Conclusions. In *Tense and Aspect in Indo-European Languages*, edited by John Hewson and Vit Bubenik, pp. 351-364. Amsterdam: John Benjamins Publishing Company.

Hofling, Charles Andrew

- 1998 *The Language of the Inscriptions of the Central Peten*: Paper presented at the 63rd Annual Meeting of the Society for American Archaeology, March 25-29. Seattle, Wa. 1998.

Hofling, Charles Andrew, and Félix Fernando Tesucún

- 1997 *Itzaj Maya-Spanish-English Dictionary: Diccionario Maya Itzaj-Español-Ingles*. Salt Lake City: University of Utah Press.

Hopkins, Nicholas A.

- 1985 On the History of the Chol Language. In *Fifth Palenque Round Table, 1983*, edited by Merle Greene Robertson and Virginia M. Fields, pp. 1-6. San Francisco: Pre-Columbian Art Research Institute.
- 1988a The Lexicon of Maya Hieroglyphic Inscriptions. In *Chol (Mayan) Dictionary Database, Part I*, edited by J. Kathryn Josserand and Nicholas A. Hopkins, pp. 1-20.
- 1988b Comments on David S. Stuart, "Ten Phonetic Syllables". In *Chol (Mayan) Dictionary Database, Part I*, edited by J. Kathryn Josserand and Nicholas A. Hopkins, pp. 1-15.
- 1993 Review of "Lecturas Sobre la Lingüística Maya". *International Journal of American Linguistics* 59(3), pp. 359-363.
- 1997 Decipherment and the Relation between Mayan Languages and Maya Writing. In *Language of Maya Hieroglyphs*, edited by Martha J. Macri and Anabel Ford, pp. 77-88. San Francisco: Pre-Columbian Art Research Institute.

Hopkins, Nicholas A., and J. Kathryn Josserand

- 1988a Discourse Structures in Maya Hieroglyphic Inscriptions. In *Chol (Mayan) Dictionary Database, Part I*, edited by J. Kathryn Josserand and Nicholas A. Hopkins, pp. 1-36.
- 1988b Notes on Chol Grammar. In *Chol (Mayan) Dictionary Database, Part II*, edited by J. Kathryn Josserand and Nicholas A. Hopkins, pp. 1-5. : J. Kathryn Josserand and Nicholas A. Hopkins.
- 1988c Berendt's Chol Word List: Mid-Nineteenth Century Chol. In *Chol (Mayan) Dictionary Database, Part II*, edited by J. Kathryn Josserand and Nicholas A. Hopkins, pp. 1-15. : J. Kathryn Josserand and Nicholas A. Hopkins.
- 1988d Sapper's (1907) Chol Word List: Late Nineteenth Century Chol from Tila and Tumbalá. In *Chol (Mayan) Dictionary Database, Part II*, edited by J. Kathryn Josserand and Nicholas A. Hopkins, pp. 1-24. : J. Kathryn Josserand and Nicholas A. Hopkins.

- 1988e Chol Vocabulary, Tumbalá Chol, ca. 1900: Recorded by Mr. Henry Rau. In *Chol (Mayan) Dictionary Database, Part II*, edited by J. Kathryn Josserand and Nicholas A. Hopkins, pp. 1-30. : J. Kathryn Josserand and Nicholas A. Hopkins.
- 1988f Chol Mayan Vocabulary Survey Database: Fascicle 10. In *Chol (Mayan) Dictionary Database, Part III*, edited by J. Kathryn Josserand and Nicholas A. Hopkins.
- 1988g Chol Monosyllable Dictionary Database: Fascicle 11. In *Chol (Mayan) Dictionary Database, Part III*, edited by J. Kathryn Josserand and Nicholas A. Hopkins.
- Hopper, Paul J.
- 1979 Aspect and Foregrounding in Discourse. *Syntax and Semantics* 12, pp. 213-241.
- 1982 *Tense-Aspect: Between Semantics and Pragmatics*. Amsterdam: John Benjamins Publishing Co..
- Hopper, Paul J., and Elizabeth Closs Traugott
- 2003 *Grammaticalization, Second Edition*. Cambridge: Cambridge University Press.
- Houston, Stephen D.
- 1984 An Example of Homophony in Maya Script. *American Antiquity* 49(4), pp. 790-805.
- 1989a Nagual Glyph: Letter to Linda Schele of October 19, 1989 circulated among epigraphers, pp. 1-6.
- 1989b *Maya Glyphs: Reading the Past*. Berkeley: The University of California Press.
- 1993 *Hieroglyphs and History at Dos Pilas: Dynastic Politics of the Classic Maya*. Austin: University of Texas Press.
- 1994 Literacy among the Pre-Columbian Maya: A Comparison. In *Writing Without Words*, edited by Elizabeth Hill Boone and Walter D. Mignolo, pp. 27-49. Durham: Duke University Press.
- 1996 Review of "The Writing System of La Mojarra and Associated Monuments" by Lloyd B. Anderson. *International Journal of American Linguistics* 62(4), pp. 429-431.
- 1997 The Shifting Now: Aspect, Deixis, and Narrative in Classic Maya Texts. *American Anthropologist* 99(2), pp. 291-304.

- Houston, Stephen D., and Michael Coe
2003 Has Isthmian Writing Been Deciphered?. *Mexicon* 25(6), pp. 151-161.
- Houston, Stephen D., and Peter Mathews
1985 *The Dynastic Sequence of Dos Pilas, Guatemala*. San Francisco: Pre-Columbian Art Research Institute.
- Houston, Stephen D., John S. Robertson, and David S. Stuart
2000a The Language of the Classic Maya Inscriptions. *Current Anthropology* 41(3), pp. 321-338.
2000b The Language of the Classic Maya Inscriptions: Reply. *Current Anthropology* 41(3), pp. 346-352.
2001a Quality and Quantity in Glyphic Nouns and Adjectives. *Research Reports on Ancient Maya Writing* 47, pp. 1-56.
- Houston, Stephen D., and David S. Stuart
1989 The Way Glyph: Evidence for “Co-essences” among the Classic Maya. *Research Reports on Ancient Maya Writing* 30, pp. 1-16.
1996 Of Gods, Glyphs and Kings: Divinity and Rulership among the Classic Maya. *Antiquity* 70, pp. 289-312.
1998 The Ancient Maya Self: Personhood and Portraiture in the Classic Period. *Res* 33, pp. 73-101.
- Houston, Stephen D., David S. Stuart, and John S. Robertson
1998 Disharmony in Maya Hieroglyphic Writing: Linguistic Change and Continuity in Classic Society. In *Anatomía de Una Civilización*, edited by Andrés Ciudad Ruiz and Yolanda Fernández Marquín, pp. 275-296. Madrid: Sociedad Española de Estudios Mayas.
- Houston, Stephen D., Oswaldo Chinchilla Mazariegos, and David S. Stuart, editors.
2001b *Decipherment of Ancient Maya Writing*. Norman: University of Oklahoma Press.
- Hruby, Zachary X., and Mark B. Child
2004 Chontal Linguistic Influence in Ancient Maya Writing: Intransitive Positional Verbal Affixation. In *Linguistics of Maya Writing*, edited by Søren Wichmann, pp. 13-26. Salt Lake City: University of Utah Press.
- Hruby, Zachary X., and John S. Robertson
2001 A Reading of the “Completion Hand” as Tzutz. In *Decipherment of Ancient Maya Writing*, edited by Stephen D. Houston, Oswaldo Chinchilla Mazariegos, and David S. Stuart, pp. 25-40. Norman: University of Oklahoma Press.

- Hull, Kerry M.
 2003 *Verbal Art and Performance in Ch'orti' and Maya Hieroglyphic Writing*. Ph.D. dissertation, University of Texas at Austin.
- 2005 *An Abbreviated Dictionary of Ch'orti' Maya: A final report for the Foundation for the Advancement of Mesoamerican Studies, Inc.* Crystal River: FAMSI
 <<http://www.famsi.org/reports/03031/index.html>>, reference checked 2/15/2007.
- Jespersen, Otto
 1951 *Philosophy of Grammar*. London: George Allen & Unwin Ltd..
- Jones, Christopher, Linton Satterthwaite
 1982 *Monuments and Inscriptions of Tikal: The Carved Monuments. Tikal Report No. 33, Part A*. Philadelphia: University Museum, University of Pennsylvania.
- Josserand, J. Kathryn
 1988 The Discourse Structure of Maya Hieroglyphic Texts: Paper Presented at the Annual Meeting of the American Anthropological Associations in Chicago, Illinois, on November 21, 1987. In *Chol (Mayan) Dictionary Database, Part I*, edited by J. Kathryn Josserand and Nicholas A. Hopkins, pp. 1-14.
- 1991 The Narrative Structure of Hieroglyphic Texts at Palenque. In *Sixth Palenque Round Table, 1986*, edited by Merle Greene Robertson and Virginia M. Fields, pp. 1-61. Norman: University of Oklahoma Press.
- 1995 Participant Tracking in Maya Hieroglyphic Texts: Who was that Masked Man?. *Journal of Linguistic Anthropology* 5(1), pp. 65-89.
- 1997 Participant Tracking in Maya Hieroglyphic Texts: Who Was That Masked Man?. In *Language of Maya Hieroglyphs*, edited by Martha J. Macri and Anabel Ford, pp. 111-127. San Francisco: Pre-Columbian Art Research Institute.
- Josserand, J. Kathryn, and Nicholas A. Hopkins
 1988a Chol Grammar Notes: Charts and Formulas. (Revised Feb 1987). In *Chol (Mayan) Dictionary Database, Part II*, edited by J. Kathryn Josserand and Nicholas A. Hopkins, pp. 1-9.
- 1988b Chol Grammar: Morphology Charts. In *Chol (Mayan) Dictionary Database, Part II*, edited by J. Kathryn Josserand and Nicholas A. Hopkins, pp. 1-8.
- 1988c *Chol (Mayan) Dictionary Database, Part II: Chol Dictionary Database*.
- Josserand, J. Kathryn, Linda Schele, and Nicholas A. Hopkins
 1985 Linguistic Data on Mayan Inscriptions: The Ti Constructions. In *Fourth Palenque Round Table, 1980*, edited by Merle Greene Robertson and Elizabeth P. Benson, pp. 87-102. San Francisco: Pre-Columbian Art Research Institute.

Justeson, John S.

- 1984 Interpretations of Mayan Hieroglyphs: Appendix B. In *Phoneticism in Mayan Hieroglyphic Writing*, edited by John S. Justeson and Lyle Campbell, pp. 315-362. Albany: Institute for Mesoamerican Studies.

Justeson, John S., and Terry S. Kaufman

- 1993 A Decipherment of Epi-Olmec Hieroglyphic Writing. *Science* 259, pp. 1703-1711.

Justeson, John S., and Lyle Campbell

- 1984 *Phoneticism in Mayan Hieroglyphic Writing*. Albany: Institute for Mesoamerican Studies, SUNY Albany.
- 1997 The Linguistic Background of Maya Hieroglyphic Writing: Arguments against a "Highland Mayan" Role. In *Language of Maya Hieroglyphs*, edited by Martha J. Macri and Anabel Ford, pp. 41-68. San Francisco: Pre-Columbian Art Research Institute.

Justeson, John S., William M. Norman, Lyle Campbell and Terrence Kaufman

- 1983 Foreign Impact on Lowland Mayan Language and Script: A Summary. In *Highland-Lowland Interaction in Mesoamerica: Interdisciplinary Approaches*, edited by Arthur G. Miller, pp. 147-158. Washington: Dumbarton Oaks Research Library and Collection.
- 1985 *The Foreign Impact on Lowland Mayan Language and Script*. New Orleans: Middle American Research Institute, Tulane University.

Kaufman, Terrence S.

- 1971 *Tzeltal Phonology and Morphology*. Berkeley: University of California Publications.
- 1972 *El Proto-Tzeltal-Tzotzil: Fonología Comparada y Diccionario Reconstruido*. Mexico: Universidad Nacional Autónoma de México.
- 1989 *Mayan Comparative Studies*. MS in possession of author.
- 2003 *A Preliminary Mayan Etymological Dictionary*. Crystal River: FAMSI
<<http://www.famsi.org/reports/01051/index.html>>, reference checked 2/15/2007.

Kaufman, Terrence S., and John S. Justeson

- 2001 Epi-Olmec Hieroglyphic Writing and Texts. In *Notebook for the XXVth Maya Hieroglyphic Forum at Texas*, edited by Nikolai Grube, pp. 1-98. Austin: University of Texas at Austin.

- Kaufman, Terrence S., and William M. Norman
 1984 An Outline of Proto-Cholan Phonology, Morphology, and Vocabulary. In *Phoneticism in Mayan Hieroglyphic Writing*, edited by John S. Justeson and Lyle Campbell, pp. 77-166. Albany: Institute for Mesoamerican Studies.
- Keating, Elizabeth
 1997 Honorific Possession: Power and Language in Pohnpei, Micronesia. *Language in Society* 26(2), pp. 247-268.
- Keller, Kathryn C., and Plácido Luciano G.
 1997 *Diccionario Chontal de Tabasco: (Mayense)*. Tucson: Summer Institute of Linguistics.
- Kelley, David H.
 1962 Phoneticism in the Maya Script. *Estudios de Cultura Maya* 2, pp. 1-43.
 1968 Kakupacal and the Itzas. *Estudios de Cultura Maya* 7, pp. 255-268.
 1976 *Deciphering the Maya Script*. Austin: University of Texas Press.
- Kerr, Justin
 2007 *The Maya Vase Database: An Archive of Rollout Photographs*. (Ongoing updates.) Crystal River: FAMSI, <<http://research.famsi.org/kerrmaya.html>>, reference checked 2/15/2007.
- Kerr, Justin, and Barbara Kerr
 1989 *The Maya Vase Book, Volume 1: A Corpus of Rollout Photographs of Maya Vases*. New York: Kerr Associates.
- Knorozov, Yuri V., Sophie Coe, and Tatiana Proskouriakoff
 1967 *Selected Chapters from the Writing of Maya Indians*. Laguna Hills: Aegean Park Press.
- Knowles, Susan M.
 1984 *A Descriptive Grammar of Chontal Maya (San Carlos Dialect)*. New Orleans: Tulane University.
- Knowlton, Timothy
 2002 Diphrastric Kennings in Mayan Hieroglyphic Literature. *Mexicon* 24(1), pp. 9-14.
- Kozinsky, Isaak Š.
 1988 Typology of Resultative Constructions. In *Typology of Resultative Constructions*, edited by Vladimir P. Nedjalkov and Bernard Comrie, pp. 497-525. Amsterdam: John Benjamins Publishing Co..

Lacadena García-Gallo, Alfonso

- 1995 *Evolución formal de las grafías escriturarias mayas: Implicaciones históricas y culturales*. Ph.D. thesis. Madrid: Universidad Complutense de Madrid.
- 1996 *Bilingüismo en el Codice de Madrid: Paper presented at the VI Encuentro de Investigadores del Area Maya, Campeche, Mexico*. Unpublished Paper pp. 1-33.
- 2000 Antipassive Constructions in the Maya Glyphic Texts. *Written Language and Literacy* 3(1), pp. 155-180.
- 2004 Passive Voice in Classic Mayan Texts: *CV-h-C-aj* and *-n-aj* Constructions. In *Linguistics of Maya Writing*, edited by Søren Wichmann, pp. 165-194. Salt Lake City: University of Utah Press.

Lacadena García-Gallo, Alfonso, and Søren Wichmann

- 2002 The Distribution of Lowland Maya Languages in the Classic Period: Paper Presented at the III Mesa Redonda de Palenque. June 27 - July 4, 1999. *Memoria de la Tercera Mesa Redonda de Palenque, Volume II*, pp. 278-319.
- 2004 On the Representation of the Glottal Stop in Maya Writing. In *Linguistics of Maya Writing*, edited by Søren Wichmann, pp. 100-162.

Laughlin, Robert M.

- 1975 *The Great Tzotzil Dictionary of San Lorenzo Zinacantán*. Washington: Smithsonian Institution Press.
- 1988 *The Great Tzotzil Dictionary of Santo Domingo Zinacantán*. Three Volumes, numbered consecutively. Washington: Smithsonian Institution Press.

Lenkersdorf, Carlos

- 1979 *Diccionario Tojolabal - Español, Vol. 1; B'omak'umal Tojol Ab'al - Kastiya*. Mexico: Editorial Nuestro Tiempo.

Lévi-Strauss, Claude

- 1963 *Structural Anthropology*. New York: Basic Books, Inc..

Longhena, Maria, and Rosanna M. Giammanco Frongia

- 2000 *Maya Script: A Civilization and Its Writing*. New York: Abbeville Press.

Looper, Matthew G.

- 1991 A Reinterpretation of the Wooden Box from Tortuguero. *Texas Notes on Precolumbian Art, Writing, and Culture* 11, pp. 1-4.

- 1995 *The Sculpture Programs of Butz'-Tiliw, an Eighth-Century Maya King of Quirigua, Guatemala*. Austin: University of Texas at Austin.
- 2003 *Lightning Warrior: Maya Art and Kingship at Quirigua*. Austin: University of Texas Press.
- Lopez Raqued, Margarita
- 1989 *Acerca de los Alfabetos para Escribir los Idiomas Mayas: Acerca de los Idiomas Mayas de Guatemala*. Guatemala: Ministerio de Cultura y Deportes.
- Lounsbury, Floyd G.
- 1973 On the Derivation and Reading of the 'Ben-Ich' Prefix. In *Mesoamerican Writing Systems*, edited by Elizabeth Benson, pp. 99-144. Washington: Dumbarton Oaks Research Library and Collection.
- 1974 The Inscription of the Sarcophagus Lid at Palenque. In *Primera Mesa Redonda de Palenque, Part 1*, edited by Merle Greene Robertson, pp. 5-20. Pebble Beach: Robert Louis Stevenson School.
- 1980 Some Problems in the Interpretation of the Mythological Portion of the Hieroglyphic Text of the Temple of the Cross at Palenque. In *Third Palenque Round, 1978, Part 2*, edited by Merle Greene Robertson, pp. 99-115. Austin: University of Texas Press.
- 1997 The Wrong Language. In *Language of Maya Hieroglyphs*, edited by Martha J. Macri and Anabel Ford, pp. 33-40. San Francisco: Pre-Columbian Art Research Institute.
- Lubeck, John E., and Diane L. Cowie
- 1989 *Método Moderno Para Aprender el Idioma Chortí: Una Gramática Pedagógica*. Guatemala: Instituto Lingüístico de Verano.
- Luxton, Richard N.
- 1995 *The Book of Chumayel: The Counsel Book of the Yucatec Maya 1539-1638*. Laguna Hills: Aegean Park Press.
- MacLeod, Barbara
- 1982 Split-Ergativity in the Cholan and Yucatecan Languages: Appendix 5. In *Maya Glyphs: The Verbs*, edited by Linda Schele, pp. 420-421. Austin: University of Texas Press.
- 1984 Cholan and Yucatec Verb Morphology and Glyphic Verbal Affixes in the Inscriptions. In *Phoneticism in Mayan Hieroglyphic Writing*, edited by John S. Justeson and Lyle Campbell, pp. 233-263. Albany: Institute for Mesoamerican Studies.

- 1987 *Epigrapher's Annotated Index to Cholan and Yucatecan Verb Morphology*. Columbia: University of Missouri-Columbia.
- 1989 The Text of Altar F': Further Considerations. *Copán Notes* 52, pp. 1-5.
- 1990 *Deciphering the Primary Standard Sequence*. Austin: University of Texas at Austin.
- 1991 T128: A Reprise. *North Austin Hieroglyphic Hunches* 5, pp. 1-7.
- 1991 *Might the T614 "thatch" glyph be kab "earth"?: Note circulated among epigraphers dated January 1991*, pp. 1-10.
- 1992 Maya Genesis: The First Steps: North Austin Hieroglyphic Hunches, #5. In *Notebook for the XVIth Maya Hieroglyphic Workshop at Texas*, edited by Linda Schele, pp. 239-253. Austin: University of Texas at Austin.
- 1997 *Workbook for the Third Annual Advanced Workshop on Maya Hieroglyphic Writing*. Chapel Hill: The Duke-UNC Program in Latin American Studies.
- 2004 A World in a Grain of Sand: Transitive Perfect Verbs in the Classic Maya Script. In *Linguistics of Maya Writing*, edited by Søren Wichmann, pp. 291-325. Salt Lake City: University of Utah Press.
- n.d. *Passives and Antipassives in the Maya Writing System*. Unpublished notes circulated among epigraphers, pp. 1-4.
- MacLeod, Barbara, and Andrea Stone
- 1995 The Hieroglyphic Inscriptions of Naj Tunich. In *Images from the Underworld*, edited by Andrea J. Stone, pp. 155-184. Austin: University of Texas Press.
- Macri, Martha J., and Anabel Ford, editors.
- 1997 *The Language of Maya Hieroglyphs*. San Francisco: Pre-Columbian Art Research Institute.
- Marcus, Joyce
- 1980 *Zapotec Writing*. San Francisco: W. H. Freeman and Company.
- 1992 *Mesoamerican Writing Systems: Propaganda, Myth, and History in Four Ancient Civilizations*. Princeton: Princeton University Press.
- Martinez Hernandez, editor
- 1930 *Diccionario de motul, maya-español atribuido a Fray Antonio de Ciudad Real y arte de lengua maya por Fray Juan Coronel*. Merida: Talleres de la Compañia Tipografica Yucateca, SA.

Maslov, Jurij S.

- 1988 Resultative, Perfect, and Aspect. In *Typology of Resultative Constructions*, edited by Vladimir P. Nedjalkov and Bernard Comrie, pp. 63-85. Amsterdam: John Benjamins Publishing Co..

Mathews, Peter L.

- 1983 *Corpus of Maya Hieroglyphic Inscriptions # 6.1: Tonina*. Cambridge: Peabody Museum.
- 1988 *Sculpture of Yaxchilan*. Ph.D. dissertation, Yale University, New Haven.
- 1993 *The Proceedings of the Maya Hieroglyphic Weekend, 1992: Oct. 31-Nov. 1, Cleveland*, edited by Phillip Wanyerka. Cleveland: Phil Wanyerka.
- 2001 Notes on the Inscriptions on the Back of Dos Pilas Stela 8. In *Decipherment of Ancient Maya Writing*, edited by Stephen D. Houston, Oswaldo Chinchilla Mazariegos and David S. Stuart, pp. 394-416. Norman: University of Oklahoma Press.

Mathews, Peter L., and John S. Justeson

- 1984 Patterns of Sign Substitution in Mayan Hieroglyphic Writing: The Affix Cluster. In *Phoneticism in Mayan Hieroglyphic Writing*, edited by John S. Justeson and Lyle Campbell, pp. 185-229. Albany: Institute for Mesoamerican Studies.

Mathews, Peter L., and Linda Schele

- 1974 Lords of Palenque: The Glyphic Evidence. In *Primera Mesa Redonda de Palenque, Part I*, edited by Merle Greene Robertson, pp. 63-76. Pebble Beach: Robert Louis Stevenson School.

Matthews, P. H.

- 1997a "middle". In *Concise Oxford Dictionary of Linguistics* edited by P. H. Matthews. Oxford: Oxford University Press.
<<http://www.oxfordreference.com>>, reference checked 2/15/2007.
- 1997b "medio-passive". In *The Concise Oxford Dictionary of Linguistics*, edited by P. H. Matthews. Oxford: Oxford University Press.
<<http://www.oxfordreference.com>>, reference checked 2/15/2007.

Maudslay, A. P., F. Ducane Godman, and Osbert Salvin

- 1889a *Biologia Centrali-Americana, Archaeology, Volume I: Copan*, edited by F. Ducane Godman, and Osbert Salvin London: R. H. Porter and Dulau & Co. Facsimile edition 1974. New York: Milpatron Publishing Corp.
- 1889b *Biologia Centrali-Americana, Archaeology, Volume II: Quirigua*, edited by F. Ducane Godman, and Osbert Salvin London: R. H. Porter and Dulau & Co. Facsimile edition 1974. New York: Milpatron Publishing Corp.

- Mayer, Karl Herbert
- 1989 *Maya Monuments: Sculptures of Unknown Provenance, Supplement 2*. Berlin: Verlag Von Flemming.
 - 1995 *Maya Monuments: Sculptures of Unknown Provenance, Supplement 4*. Graz: Academic Publishers.
- McQuown, Norman A.
- 1967 Classical Yucatec (Maya). In *Handbook of Middle American Indians, Volume 5*, edited by Norman A. McQuown and Robert Wauchope, pp. 201-248. Austin: University of Texas Press.
- Méndez Cruz, Antonio Feliciano
- 1997 *Diccionario Popti' (Jakalteko)-Castellano Morfosemántico*. Guatemala: Editorial Nuestra América.
- Miller, Mary Ellen
- 1984 Four Maya Reliefs. *Apollo* 119(266), pp. 31-38.
- Mish, Frederick C., and John M. Morse, editors.
- 1994 *Merriam Webster's Collegiate Dictionary, Tenth Edition*. Springfield: Merriam-Webster, Incorporated.
- Monaghan, John
- 1994 The Text in the Body, the Body in the Text: The Embodied Sign in Mixtec Writing. In *Writing Without Words*, edited by Elizabeth Hill Boone and Walter D. Mignolo, pp. 87-101. Durham: Duke University Press.
- Montejo, Ruperto, and Nicolas de Nicolas Pedro
- 1996 *Gramática del Idioma Q'anjob'al*. Antigua: Proyecto Linguistico Francisco Marroquin.
- Montgomery, John
- 1990 Drawings of Selected Maya Monuments and Inscriptions. In *U Mut Maya III*, edited by Tom Jones and Carolyn Jones, pp. 179-188. Arcata: Tom and Carolyn Jones.
 - 1992 Drawings of Maya Monuments and Inscriptions. In *U Mut Maya IV*, edited by Tom Jones and Carolyn Jones, pp. 283-290. Arcata: Tom and Carolyn Jones.
 - 1994 *Piedras Negras: The Drawings of John Montgomery*. Austin: Maya Workshop Foundation.
 - 1998 *Monuments of the Middle Usumacinta River Valley*. Austin: John Montgomery: Available from The Maya Workshop Foundation.

- 2001 *Tikal: An Illustrated History of the Ancient Maya Capital*. New York: Hippocrene Books, Inc.
- Mora-Marín, David F.
- 2000 The Syllabic Value of Sign T77 as **k'i**. *Research Reports on Ancient Maya Writing* 46, pp. 8-45.
- 2001 *Grammar, Orthography, Content, and Social Contexts of Late Preclassic Mayan Portable Texts..* Ph.D. dissertation. University at Albany, State University of New York.
- 2003 *Affixation Conventionalization: An Explanation of Regularly Disharmonic Spellings in Mayan Writing*, pp. 1-53. Submitted for review to *Written Language and Literacy*.
- 2005 The Proto-ch'olan Positional Status Marker **-täl* and Additional Comments on Classic Mayan Positional Morphology. *Wayeb* 17, pp. 1-5.
- Morán, Francisco
- 1695 *Arte y Vocabulario de la Lengua Choltí que quiere decir la Lengua de Milperos*: Manuscript Collection 497.4/M79, American Philosophical Society, Philadelphia.
- 1935a Vocabulario en lengua choltí. In *Arte y Diccionario en Lengua Choltí*, edited by William E. Gates, pp. 1-68. Baltimore: The Maya Society.
- 1935b Arté en lengua choltí que quiere decir lengua de milperos. In *Arte y Diccionario en Lengua Choltí*, edited by William E. Gates, pp. 1-24. Baltimore: The Maya Society.
- 1935c Confesionario en lengua choltí. In *Arte y Diccionario en Lengua Choltí*, edited by William E. Gates, pp. 1-16. Baltimore: The Maya Society.
- 1935d *Arte y Diccionario en Lengua Choltí: A Manuscript from the Libro Grande of Fr. Pedro Moran of 1625*, edited by William E. Gates. Baltimore: The Maya Society.
- Moser, Christopher L.
- 1977 *Nuine Writing and Iconography of the Mixteca Baja*. Nashville: Vanderbilt University.
- Nedjalkov, Vladimir P., and Bernard Comrie, editors.
- 1988 *Typology of Resultative Constructions*. Amsterdam: John Benjamins Publishing Co.

- Nedjalkov, Vladimir P., and Sergej Je. Jaxontov
 1988 Typology of Resultative Constructions. In *Typology of Resultative Constructions*, edited by Vladimir P. Nedjalkov and Bernard Comrie, pp. 3-62. Amsterdam: John Benjamins Publishing Co.
- Nicholson, H. B.
 1973 Phoneticism in the Late Pre-Hispanic Central Mexican Writing System. In *Mesoamerican Writing Systems*, edited by Elizabeth Benson, pp. 1-46. Washington: Dumbarton Oaks Research Library and Collection.
- Orejel, Jorge
 1992 *Parallel Linguistic Patterns: "Paxbolon-Maldonado" Papers and Classic Maya Inscriptions*. Ph. D. Dissertation. University of Texas at Austin.
- Paxbolon, Pablo, Francisco Maldonado, and Martín Maldonado
 1614 *Paxbolon-Maldonado Papers, Parts I, II*. México, leg. 138. In Archivo General de Indias, Sevilla. Photos in Library of Congress, pp. 1-939. Facsimile in Scholes and Roys (1968:ff.366), pp.154-170.
- Pérez Martinez, Vitalino
 1994 *Gramática del Idioma Ch'orti'*. La Antigua: Proyecto Lingüístico Francisco Marroquin.
- Pérez Martinez, Vitalino, Federico Garcia, and Felipe Martinez
 1996 *Diccionario Ch'orti': Jocotan, Chiquimula*. Antigua: Proyecto Lingüístico Francisco Marroquin.
- Pérez González, Benjamín, and Santiago de la Cruz
 1998 *Diccionario Chontal: Chontal-Español, Español-Chontal*. Mexico: Instituto Nacional de Antropología e Historia.
- Pickett, Joseph P., David R. Pritchard, and Christopher Leonisio, editors.
 2000 *American Heritage Dictionary, Fourth Edition*. Based on print version: *The American Heritage(R) Dictionary of the English Language, Fourth Edition*. Boston: Houghton Mifflin Company.
- Pineda, Vincente
 1986 *Sublevaciones Indigenas en Chiapas: Gramatica y Diccionario Tzeltal*. Mexico: Instituto Nacional Indigenista.
- Pope, Maurice
 1999 *Story of Decipherment: From Egyptian Hieroglyphs to Maya Script, Revised Edition*. New York: Thames and Hudson.

- Pountain, Christopher J.
 1994 The Castilian reflexes of ABHORRERE/ABHORRESCERE: A Case-study in Valency. In *Hommages Offerts à Maria Manoliu-Manea*, edited by Coman Lupu and Glanville Price, pp. 122-148.
- Proskouriakoff, Tatiana
 1960 Historical Implications of a Pattern of Dates at Piedras Negras, Guatemala. *American Antiquity* 25(4), pp. 454-475.
 1961 The Lords of the Maya Realm. *Expedition* 4(1), pp. 14-21.
- Quizar, Robin
 1994 Split Ergativity and Word Order in Ch'orti'. *International Journal of American Linguistics* 60(2), pp. 120-138.
- Quizar, Robin, and Susan M. Knowles-Berry
 1988 Ergativity in the Cholan Languages. *International Journal of American Linguistics* 54(1), pp. 73-95.
- Rafinesque-Schmaltz, Constantine Samuel
 1828 First Letter to Mr. Champollion, on the Graphic Systems of America: and the Glyphs of Otolum or Palenque, in Central America. In *Decipherment of Ancient Maya Writing*, edited by Stephen D. Houston, Oswaldo Chinchilla Mazariegos, and David S. Stuart, pp. 45-47. Norman: University of Oklahoma Press.
- Ramírez Pérez, José, Andrés Montejo, and Baltazar Díaz Hurtado
 1996 *Diccionario del Idioma Jakalteko: Jakaltenango, Huehuetenango*. Antigua: Proyecto Lingüístico Francisco Marroquín.
- Reents-Budet, Dorie J.
 1994 *Painting the Maya Universe: Royal Ceramics of the Classic Period*. Durham: Duke University Press.
- Reents, Dorie J., and Ronald L. Bishop
 1985 History and Ritual Events on a Petexbatun Classic Maya Polychrome Vessel. In *Fifth Palenque Round Table, 1983*, edited by Merle Greene Robertson and Virginia M. Fields, pp. 57-64. San Francisco: Pre-Columbian Art Research Institute.
- Riese, Berthold
 1984 Hel Hieroglyphs. In *Phoneticism in Mayan Hieroglyphic Writing*, edited by John S. Justeson and Lyle Campbell, pp. 263-286. Albany: Institute for Mesoamerican Studies.

Ringle, William M.

- 1996 Birds of a Feather: The Fallen Stucco Inscription of Temple XVIII, Palenque, Chiapas. In *Eighth Palenque Round Table, 1993*, edited by Merle Greene Robertson and Martha Macri, pp. 45-62. San Francisco: Pre-Columbian Art Research Institute.

Robertson, John S.

- 1992 *History of Tense/Aspect/Mood/Voice in the Mayan Verbal Complex*. Austin: University of Texas Press.
- 1998 A Ch'olti'an Explanation for Ch'orti'an Grammar: A Postlude to the Language of the Classic Maya. *Mayab* 11, pp. 5-11.

Robertson, John S., Stephen D. Houston, and David S. Stuart

- 2004 Tense and Aspect in Maya Hieroglyphic Script. In *Linguistics of Maya Writing*, edited by Søren Wichmann, pp. 259-290. Salt Lake City: University of Utah Press.

Robertson, Merle Greene (see Greene Robertson, Merle)

Rosny, Léon de

- 1876a *Essai sur le Déchiffrement de l'Écriture Hiéatique de l'Amérique Centrale*. Paris: Maisonneuve.
- 1876b Essai sur le Déchiffrement de l'Écriture Hiératique Maya. *Archives de la Société Américaine de France* (2), pp. 5-108.
- 1883 Vocabulaire de l'Écriture Hiératique Yucatèque: I - XXX. In *Codex Cortesianus: manuscrit hieratique des anciens Indiens de l'Amérique Centrale*, edited by Léon de Rosny, pp. 1-30.

Roys, Ralph L.

- 1967 *Book of Chilam Balam of Chumayel*. Norman: University Of Oklahoma Press.

Ruz Lhuillier, Alberto

- 1958 Exploraciones Arqueológicas en Palenque: 1954. *Anales del Instituto Nacional de Antropología e Historia* 10(39), pp. 117-184.

Sadler, Louisa, and Andrew Spencer

- 1998 Morphology and Argument Structure. In *Handbook of Morphology*, edited by Andrew Spencer and Arnold M. Zwicky, pp. 206-236. : Blackwell Publishers.

Sam Juarez, Miguel, Ernesto Chen Cao, and Crisanto Xal Tec

- 2001 *Diccionario Q'eqchi': Molob'aal Aatin*. La Antigua: Proyecto Lingüístico Francisco Marroquin.

- Santos Nicolás, José Francisco, and José Gonzalo Benito Pérez
 1998 *Gramática Poqom: Rukorb'aal Poqom Q'orb'al*. Guatemala: Editorial Cholsamaj.
- Sapiens (Editors N/A),
 1975 *Sapiens: Enciclopedia Ilustrada de la Lengua Castellana. Decimosexta Edición, Tomo Quinto T - Z, Apéndices*. Buenos Aires: Editorial Sopena Argentina.
- Sattler, Mareike
 2004 Analysis of the Arte de la lengua Ch'olti by Fray Francisco Morán. In *Linguistics of Maya Writing*, edited by Søren Wichmann, pp. 365-405. Salt Lake City: University of Utah Press.
- Schele, Linda
 1976 Accession Iconography of Chan-Bahlum in the Group of the Cross at Palenque. In *Primera Mesa Redonda de Palenque, Part II*, edited by Merle Greene Robertson, pp. 9-34. Pebble Beach: Robert Louis Stevenson School.
- 1982 *Maya Glyphs: The Verbs*. Austin: University of Texas Press.
- 1986 *Notebook for the Maya Hieroglyphic Writing Workshop at Texas, March, 1986*. Austin, TX: Institute of Latin American Studies, University of Texas at Austin.
- 1987 New Fits on the North Panel of the West Door of Temple 11. *Copán Notes* 38, pp. 1-16.
- 1988 *Notebook for the Maya Hieroglyphic Writing Workshop at Texas, March 1988*. Austin: Art Department, University of Texas at Austin.
- 1989a *Notebook for the XIIIth Maya Hieroglyphic Workshop at Texas*. Austin: Art Department, University of Texas at Austin.
- 1989b The Dynastic History of Copán. In *Notebook for the XIIIth Maya Hieroglyphic Workshop at Texas*, edited by Linda Schele, pp. 65-127. Austin: Art Department, University of Texas at Austin.
- 1990 *Notebook for the XIVth Maya Hieroglyphic Workshop at Texas*. Austin: Art Department, University of Texas at Austin.
- 1991a *Notebook for the XVth Maya Hieroglyphic Workshop at Texas*. Austin: University of Texas at Austin.
- 1991b Yaxchilan: The Life and Times of Bird-Jaguar. In *Notebook for the XVth Maya Hieroglyphic Workshop at Texas*, edited by Linda Schele, pp. 80-200. Austin: University of Texas at Austin.

- 1991c *The Proceedings of the Maya Hieroglyphic Workshop March 9-10, 1991 University of Texas at Austin*, transcribed and edited by Phil Wanyerka. Cleveland: Phil Wanyerka.
- 1992a The Group of the Cross: Drawings and Chronology. In *Notebook for the XVIth Maya Hieroglyphic Workshop at Texas*, edited by Linda Schele, pp. 79-96. Austin: University of Texas at Austin.
- 1992b The Group of the Cross at Palenque: A Commentary on Creation. In *Notebook for the XVIth Maya Hieroglyphic Workshop at Texas*, edited by Linda Schele, pp. 117-204. Austin: University of Texas at Austin.
- 1992c *Notebook for the XVIth Maya Hieroglyphic Workshop at Texas*. Austin: University of Texas at Austin.
- 1993 A Reexamination of U-Yak'-Chak. *Copán Notes* 111, pp. 1-2.
- 1994 *Notebook for the XVIIIth Maya Hieroglyphic Workshop at Texas*. Austin: University of Texas at Austin.
- 2007 *The Linda Schele Drawing Collection*. Crystal River: FAMSI
<<http://www.famsi.org/research/schele/>>, reference checked 2/15/2007.

Schele, Linda and David Freidel

- 1990 *Forest of Kings: Untold Story of the Ancient Maya*. New York: William Morrow and Company, Inc..

Schele, Linda, and Nikolai Grube

- 1994 Tlaloc-Venus Warfare: The Peten Wars 8.17.0.0.0 - 9.15.13.0.0. In *Notebook for the XVIIIth Maya Hieroglyphic Workshop at Texas*, edited by Linda Schele and Nikolai Grube, pp. 79-167. Austin: University of Texas at Austin.
- 1995 *Notebook for the XIXth Maya Hieroglyphic Workshop at Texas*. Austin: University of Texas at Austin.
- 1997 *Notebook for the XXIst Maya Hieroglyphic Workshop at Texas*. Austin: University of Texas at Austin.
- 2002 Introduction to Reading Maya Hieroglyphs. In *Notebook for the XXVIth Maya Hieroglyphic Forum at Texas*, edited by Linda Schele and Nikolai Grube, pp. 1-89. Austin: University of Texas at Austin.

Schele, Linda, and Matthew G. Looper

- 1986 The Inscriptions of Quirigua and Copán. In *Notebook for the XXth Maya Hieroglyphic Workshop at Texas*, edited by Linda Schele and Matthew G. Looper, pp. 90-159. Austin: University of Texas at Austin.

- Schele, Linda, and Peter Mathews
 1979 *The Bodega of Palenque, Chiapas, Mexico*. Washington: Dumbarton Oaks Research Library and Collection.
- 1993a *Notebook for the XVIIth Maya Hieroglyphic Workshop at Texas*. Austin: University of Texas at Austin.
- 1993b The Dynastic History of Palenque. In *Notebook for the XVIIth Maya Hieroglyphic Workshop at Texas*, edited by Linda Schele and Peter Matthews, pp. 90-165. Austin: University of Texas at Austin.
- 1998 *The Code of Kings: The Language of Seven Sacred Maya Temples and Tombs*. New York: Scribner.
- Schele, Linda, David S. Stuart, and Nikolai Grube
 1989a A New Inscription from Temple 22a at Copán. *Copán Notes* 57, pp. 1-6.
- 1989b A Commentary on the Restoration and Reading of the Glyphic Panels from Temple 11. *Copán Notes* 64, pp. 1-18.
- Schele, Linda, Mary Ellen Miller, and Justin Kerr
 1986 *Blood of Kings: Dynasty and Ritual in Maya Art*. New York: George Braziller, Inc..
- Schele, Linda, Nikolai Grube, and Federico Fahsen
 1994 The Xukpi Stone: A Newly Discovered Early Classic Inscription from the Copán Acropolis. *Copán Notes* 114, pp. 1-8.
- Schiffrin, Deborah
 1987 *Discourse Markers*. Cambridge: Cambridge University Press.
- Scholes, France V. and Ralph L. Roys
 1968 *Maya Chontal Indians of Acalan-Tixchel: Contribution to History & Ethnography of Yucatan Peninsula*. Norman: University of Oklahoma Press.
- Schumann G., Otto
 1973 *La Lengua Chol, de Tila (Chiapas): Narrativa Tradicional Ch'ol de Tumbala, Chiapas*. Mexico: Universidad Nacional Autónoma de México.
- Sedat S., Guillermo
 1955 *Nuevo Diccionario de las Lenguas K'ekchi' y Española: En dos Partes*. Chamelco: Instituto Lingüístico de Verano.
- Seler, Eduard
 1902 *Gesammelte Abhandlungen zur Amerikanische Sprach- und Altherthumskunde, Vol. 1*. Mexico: Universidad Nacional Autónoma de México.

- 1990 Deciphering the Maya Manuscripts. In *Collected Works in Mesoamerican Linguistics and Archaeology, Volume 1, Second Edition*, edited by J. Eric S. Thompson and Francis B. Richardson, pp. 104-108. Culver City: Labyrinthos.
- Sharer, Robert J.
1994 *The Ancient Maya, 5th Edition*. Stanford: Stanford University Press.
- Shepard, Anna O.
1980 *Ceramics for the Archaeologist*. Washington: Carnegie Institution of Washington.
- Sherzer, Joel
1987 A Discourse-Centered Approach to Language and Culture. *American Anthropologist* 89(2), pp. 295-307.
- Shopen, Timothy
1985 *Language Typology and Syntactic Description, Volume 1*. Cambridge: Cambridge University Press.
- Silverstein, M.
1976 Shifters, Linguistic Categories and Cultural Description. In *Meaning in Anthropology*, edited by Keith Basso and H. Selby, pp. 11-57. Albuquerque: University of New Mexico Press.
- Simpson, D. P.
1960 *Cassell's New Latin Dictionary: Latin-English, English-Latin*. New York: Funk & Wagnalls Company.
- Slocum, Marianna C., Florencia L. Gerdel, and Manuel Cruz Aguilar
1999 *Diccionario Tzeltal de Bachajón Chiapas, Segunda Edición*. Coyoacán: Instituto Lingüístico de Verano.
- Smailus, Ortwin
1975 *El Maya-Chontal de Acalan: Análisis Lingüístico de un Documento de los Años 1610-12*. Mexico: Universidad Nacional Autónoma de México.
- Smith, Joshua Hinmán
n.d. *Manual de Tzeltal de Manuel: ó El Tzeltal Como Quien Dice*. San Cristóbal de las Casas. <<http://www.tzeltal.org/download/TzeltalManual.pdf>> , reference checked 2/15/2007.

1999 *Manual of Spoken Tzeltal*, translated and edited by Stuart P. Robinson and Madelief Bertens. <<http://www.zapata.org/Tzotzil/>>, reference checked 2/15/2007.

- Smith, Mary Elizabeth
- 1973a *Picture Writing from Ancient Southern Mexico: Mixtec Place Signs and Maps*. Norman: University of Oklahoma Press.
 - 1973b The Relationship between Mixtec Manuscript Painting and the Mixtec Language: A Study of Some Personal Names in Codices Muro and Sánchez Solís. In *Mesoamerican Writing Systems*, edited by Elizabeth Benson, pp. 47-98. Washington: Dumbarton Oaks Research Library and Collection.
- Spencer, Andrew, and Arnold M. Zwicky
- 1998 *The Handbook of Morphology*. : Blackwell Publishers.
- Sprajc, Ivan
- 2001 *Archaeological Reconnaissance in Southeastern Campeche, México: 2001 Field Season Report*. Crystal River: FAMSI.
<<http://www.famsi.org/reports/00016/index.html>>, reference checked 2/15/2007.
- Stoll, Otto
- 1888 *Die Maya-Sprachen der Pokom-Gruppe, Erster Teil: Die Sprache der Pokonchi-Indianer*. Vienna: Alfred Holder.
- Stone, Andrea J.
- 1995 *Images from the Underworld: Naj Tunich and the Tradition of Maya Cave Painting*. Austin: University of Texas Press.
- Stross, Brian
- 1988 The Burden of Office: A Reading. *Mexicon* 10(6), pp. 118-121.
 - 1990 *Annotated Cholti Dictionary*. University of Texas at Austin.
<http://www.utexas.edu/courses/stross/choltiproject/choltiproj1.htm>
reference checked 2/15/2007.
 - 2000 *Chorti Dictionary*. Transcribed and transliterated from Wisdom (1950) *Materials on the Chorti Language: Dictionary*. University of Texas at Austin.
<<http://www.utexas.edu/courses/stross/chorti/>> reference checked 2/15/2007.
- Stuart, David S.
- 1984 *A Reconsideration of Directional "Count" Glyphs*. A paper circulated among epigraphers November, 1984, pp. 1-8.
 - 1985 The Inscriptions on Four Shell Plaques from Piedras Negras. In *Fourth Palenque Round Table, 1980*, edited by Merle Greene Robertson and Elizabeth P. Benson, pp. 175-184. San Francisco: Pre-Columbian Art Research Institute.
 - 1986 A Glyph for 'Stone Incensario'. *Copán Notes* 2, pp. 1-6.
 - 1987 Ten Phonetic Symbols. *Research Reports on Ancient Maya Writing* 14, pp. 1-52.

- 1989 T207 as OCH. Letter to Linda Schele and Nikolai Grube circulated among epigraphers dated December 15, 1989.
- 1990 Further Observations on OCH. Correspondence circulated among epigraphers dated September 11, 1990.
- 1991 The Decipherment of “Directional Count Glyphs” in Maya Inscriptions. *Ancient Mesoamerica* 1, pp. 213-224.
- 1995 *A Study of Maya Inscriptions*. Ph.D. dissertation, Vanderbilt University, Nashville.
- 1996 Kings of Stone: A Consideration of Stelae in Ancient Maya Ritual and Representation. *Res* 29, pp. 148-171.
- 1998 “The Fire Enters His House”: Architecture and Ritual in Classic Maya Texts. In *Function and Meaning in Classic Maya Architecture*, edited by Stephen D. Houston, pp. 373-425. Washington: Dumbarton Oaks Research Library and Collection.
- 2001 A Reading of the “Completion Hand” as Tzutz. In *Decipherment of Ancient Maya Writing*, edited by Stephen D. Houston, Oswaldo Chinchilla Mazariegos, and David S. Stuart, pp. 10-24. Norman: University of Oklahoma Press.
- 2002 K’inich Ahkal Mo’ Nahb’ III: A New Reading of the Glyphs. *Mesoweb* www.mesoweb.com/palenque/dig/report/sub5/ahkal_mo_nahb.html, reference checked 2/15/2007.
- 2003 On the Paired Variants of Tz’ak. *Mesoweb*, pp. 1-5. www.mesoweb.com/stuart/notes/tzak.pdf, reference checked 2/15/2007.
- 2005 *The Inscriptions from Temple XIX at Palenque: A Commentary*. San Francisco: The Pre-Columbian Art Research Institute.
- Stuart, David S., and Nikolai Grube
- 2000 A New Inscription from Nim Li Punit, Belize. *Research Reports on Ancient Maya Writing* 45, pp. 1-7.
- Stuart, David S., and Stephen Houston
- 1994 *Classic Maya Place Names*. Washington: Dumbarton Oaks Research Library and Collection.
- Stuart, David S., Stephen D. Houston, and John S. Robertson
- 1999a Recovering the Past: Classic Mayan Language and Classic Maya Gods. In *Notebook for the XXIIIrd Maya Hieroglyphic Forum at Texas*, pp. 1-80. Austin: Maya Workshop Foundation, University of Texas at Austin.

- 1999b Classic Mayan Language and Classic Maya Gods. In *Proceedings of the Maya Hieroglyphic Workshop, March 13-14, 1999*, edited by Phil Wanyerka, pp. 1-77. Austin: Phil Wanyerka.
- Stuart, George E.
 1988 Glyph Drawings from Landa's 'Relacion': A Caveat to the Investigator. *Research Reports on Ancient Maya Writing* 19, pp. 23-32.
- Tedlock, Dennis
 1996 *Popol Vuh: Definitive Edition of the Mayan Book of the Dawn of Life and the Glories of Gods and Kings, Revised Edition*. New York: Simon and Schuster.
- Thomas, Cyrus
 1882 A Study of the Manuscript Troano. In *Contributions to North American Ethnology, Volume V*, edited by J. W. Powell, pp. 1-237. : Department of the Interior.
- 1888 Aids to the study of the Maya codices. In *Sixth Annual Report of the Bureau of American Ethnology*, edited by J. W. Powell, pp. 253-371. : .
- Thomason, Sarah Grey, and John S. Kaufman
 1988 *Language Contact, Creolization, and Genetic Linguistics*. Berkeley: University of California Press.
- Thompson, J. Eric S.
 1927 The Elephant Heads in the Waldeck Manuscripts. *Scientific Monthly* 25(5), pp. 392-398.
- 1943 Maya Epigraphy: Directional Glyphs in Counting. *Carnegie Institution of Washington Notes on Middle American Archaeology and Ethnology* 20, pp. 122-126.
- 1950 *Maya Hieroglyphic Writing: An Introduction*. Norman: University of Oklahoma Press.
- 1960 *Maya Hieroglyphic Writing: An Introduction, Second Edition*. Norman: University of Oklahoma Press.
- 1962 *Catalog of Maya Hieroglyphs*. Norman: University of Oklahoma Press.
- 1971 *Maya Hieroglyphic Writing: An Introduction, Third Edition*. Norman: University of Oklahoma Press.

- 2001 The Fish as a Maya Symbol for Counting and Further Discussion of Directional Glyphs. In <Decipherment of Ancient Maya Writing>, edited by Stephen Houston and Oswaldo Chinchilla Mazariegos, pp. 127-143. Norman: University of Oklahoma Press.
- Tiesler, Vera, René Cobos, and Merle Greene Robertson, editors.
- 2002 *Memoria de la Tercera Mesa Redonda de Palenque, Volume II: La organización social entre los mayas*. Mexico: Instituto Nacional de Antropología e Historia.
- Tozzer, Alfred M.
- 1941 *Landa's Relación De Las Cosas De Yucatan: A Translation*. Cambridge: Peabody Museum.
- Traugott, Elizabeth Closs
- 1972 *A History of English Syntax: A Transformational Approach to the History of English Sentence Structure*. New York: Holt, Rinehart and Winston.
- Urban, Greg
- 1991 *A Discourse-Centered Approach to Culture: Native South American Myths and Rituals*. Austin: University of Texas Press.
- Villacorta, Carlos A., and J. Antonio Villacorta C.
- 1992 *The Dresden Codex: Drawings of the Pages and Commentary in Spanish*. (A reproduction of pages on the Dresden Codex in *Codices Mayas* published in Guatemala by Tipografía Nacional, 1930.) Laguna Hills: Aegean Park Press.
- Vincent, Nigel
- 1982 The Development of the Auxiliaries HABERE and ESSE in Romance. In *Studies in the Romance Verb*, edited by Nigel Vincent and Martin Harris, pp. 71-96. London: Croom Helm.
- Voloshinov, V. N., Ladislav Matejka, and I. R. Titunik
- 1973 *Marxism and the Philosophy of Language*. Cambridge: Harvard University Press.
- Wald, Robert F.
- 1994a *Transitive Verb Inflection in Classic Maya Hieroglyphic Texts: Its Implications for Decipherment and Historical Linguistics*. Masters thesis, University of Texas at Austin.
- 1994b *The Languages of the Dresden Codex: Legacy of the Classic Maya*. Unpublished manuscript circulated among epigraphers in 1994, pp. 1-80.
- 1997a Entering the Tomb of K'an Xok: An Event of Astronomical Importance. In *U Mut Maya VI*, edited by Carolyn Jones and Tom Jones, pp. 68-79. Arcata: Carolyn and Tom Jones.

- 1997b The Politics of Art and History at Palenque: Interplay of Text and Iconography on the Tablet of the Slaves. *Texas Notes on Precolumbian Art, Writing, and Culture* 80, pp. 1-18.
- 1998a *Marking Time in Two Aspectual Verbal Systems: Temporal Deixis in Colonial Chontal and Maya Hieroglyphic Narrative*. Paper presented at the 63rd Annual Meeting of the Society for American Archaeology, Mar.25-29, 1998, Seattle, Wa.
- 1998b *Structuring the Past: Temporal Deixis in Classic-Maya and Acalan-Chontal Narrative..* Unpublished manuscript.
- 2000a Temporal Deixis in Colonial Chontal and Maya Hieroglyphic Narrative. *Written Language and Literacy* 3(1), pp. 123-153.
- 2000b *The Nature of Tense and Aspect in the Maya Classic-Period Inscriptions*. A Presentation made at the Crabs and Glyphs Workshop, Arnold, Maryland, September 22-24, 2000.
- 2000c *Passing through the Maya Glyphic Portal: The Maya Script and the Reconstruction of Proto-Ch'olan*: A Presentation made at the 99th Annual Meeting of the American Anthropological Association, San Francisco, Nov. 15 - 19, 2000.
- 2004a Languages of the Dresden Codex: Legacy of the Classic Maya. In *Linguistics of Maya Writing*, edited by Søren Wichmann, pp. 27-58. Salt Lake City: University of Utah Press.
- 2004b Telling Time in Classic-Ch'olan and Acalan Chontal Narrative: The Linguistic Basis of Some Temporal Discourse Patterns in Maya Hieroglyphic and Acalan-Chontal Narrative. In *Linguistics of Maya Writing*, edited by Søren Wichmann, pp. 211-258. Salt Lake City: University of Utah Press.
- Wald, Robert F., and Barbara MacLeod
- 1999a Narrative Time in the Classic Period Inscriptions. In *Notebook for the XXIIIrd Maya Hieroglyphic Forum at Texas*, pp. 88-96. Austin: University of Texas at Austin.
- 1999b An Alternative View: Narrative Time in the Classic Period Inscriptions. In *Proceedings of the Maya Hieroglyphic Workshop, March 13-14, 1999*, edited by Phil Wanyerka, pp. 78-98. Cleveland: Phil Wanyerka.
- Wald, Robert F., and Michael D. Carrasco
- 2004 *Rabbits, Gods, and Kings: The Interplay of Myth and History on the Regal Rabbit Vase*. A presentation made at the Maya Meetings, University of Texas at Austin, March 11-21, 2004.

- Wanyerka, Phillip J.
 1999 *Proceedings of the Maya Hieroglyphic Workshop, March 13-14, 1999.* Cleveland: Phil Wanyerka.
- 2003 *The Southern Belize Epigraphic Project: The Hieroglyphic Inscriptions of Southern Belize.* Crystal River: FAMSI
 <<http://www.famsi.org/reports/00077/index.html>>, reference checked 2/15/2007.
- Warkentin, Viola, and Ruby Scott
 1980 *Gramatica Ch'ol.* Mexico: Instituto Linguistico de Verano.
- Whittaker, Arabelle, and Viola Warkentin
 1965 *Chol Texts on the Supernatural.* Norman: Summer Institute of Linguistics.
- Whorf, Benjamin Lee
 1932 A Central Mexican Inscription Combining Mexican and Maya Day Signs. *American Anthropologist* 34(2), pp. 296-302.
- 1956 Decipherment of the Linguistic Portion of the Maya Hieroglyphs. In *Language, Thought, and Reality: Selected Writings of Benjamin Lee Whorf*, edited by John B. Carroll, pp. 173-198. Cambridge: MIT Press.
- 1975 *Phonetic Value of Certain Characters in Maya Writing.* (Originally published in *Papers of Peabody Museum of American Archaeology and Ethnology, Harvard University* 13(2).) Millwood: Kraus Reprint Co.
- Wichmann, Søren
 1999 *A Ch'orti' Morphological Sketch.* Copenhagen. In press.
- 2004 *The Linguistics of Maya Writing.* Salt Lake City: University of Utah Press.
- Winfield Capitaine, Fernando
 1988 La Estela 1 de La Mojarra, Veracruz, Mexico. *Research Reports on Ancient Maya Writing* 16, pp. 1-36.
- Wisdom, Charles
 1950 *Materials on the Chorti Language: Dictionary.* Chicago: University of Chicago.
- Yasugi, Yoshiho
 1995 *Native Middle American Languages: An Areal-Typological Perspective.* Osaka: National Museum of Ethnology.
- Zender, Marc
 2001 Patterned Variation in **YOPAAT - YOPAT** Compounds. In *Crabs and Glyphs, 2001: Maya Hieroglyphic Writing, The Annual Advanced Workshop*, edited by Barbara MacLeod and Hutch Kinsman, pp. 78-79.

- 2004 The Morphology of Intimate Possession in Mayan Languages and Classic Mayan Glyphic Nouns. In *Linguistics of Maya Writing*, edited by Søren Wichmann, pp. 195-209. Salt Lake City: University of Utah Press.

Zimmermann, Günter

- 1956 *Die Hieroglyphen der Maya-Handschriften*. Hamburg: Cram, de Gruyter & Co.

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